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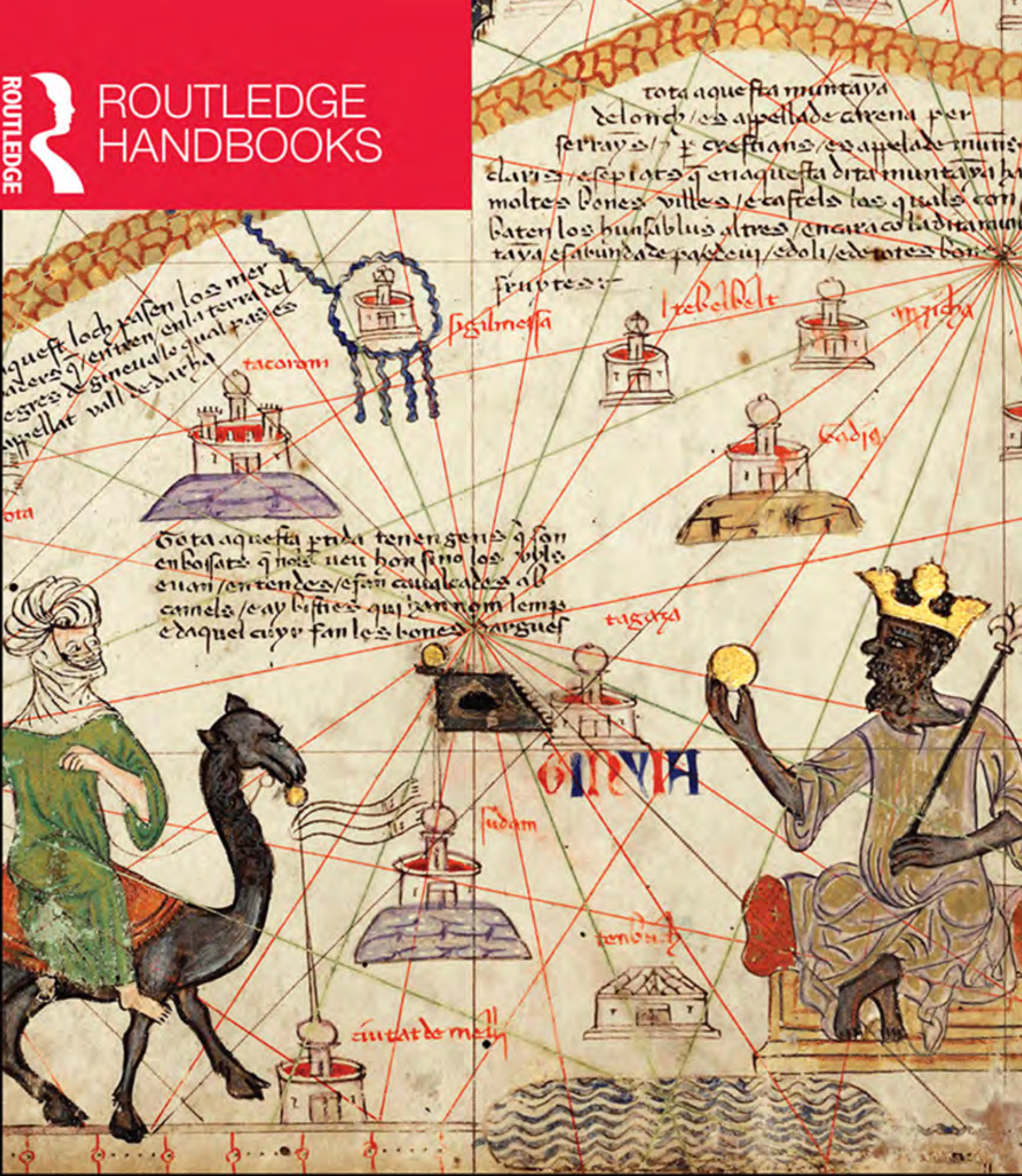

The Routledge Handbook of Archaeology and Globalization

Edited by Tamar Hodos

The Routledge Handbook of Archaeology and Globalization

This unique collection applies globalization concepts to the discipline of archaeology, using a wide range of global case studies from a group of international specialists. The volume spans from as early as 10,000 cal. BP to the modern era, analysing the relationship between material culture, cultural change, and the complex connectivities between communities and groups. In considering social practices shared between different historic groups, and also the expression of their respective identities, the papers in this volume illustrate the potential of globalization thinking to bridge the local and global in material culture analysis.

The Routledge Handbook of Archaeology and Globalization is the first such volume to take a world archaeology approach, on a multi-period basis, in order to bring together the scope of evidence for the significance of material culture in the processes of globalization. This work thus also provides a means to understand how material culture studies can be utilized to assess the impact of global engagement in our contemporary world. As such, it will appeal to archaeologists and historians as well as social science researchers interested in the origins of globalization.

Tamar Hodos is Reader in Mediterranean Archaeology in the Department of Archaeology and Anthropology, University of Bristol, UK.

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Edited by *Tamar Hodos*

WITH ALEXANDER GEURDS, PAUL LANE, IAN LILLEY, MARTIN PITTS,
GIDEON SHELACH, MIRIAM STARK, AND MIGUEL JOHN VERSLUYS

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Part I

Introduction

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1.1

Globalization

Some basics. An introduction to *The Routledge Handbook of Archaeology and Globalization*

Tamar Hodos

Globalization is one of the most potent theoretical frameworks of the moment, for it provides a means by which we can make sense of our socio-cultural connectivities, and the networks through which those connections are developed and maintained. The impact of works such as Thomas Friedman's *The World is Flat: a brief history of the twenty-first century* (2005), Naomi Klein's *The Shock Doctrine: the rise of disaster capitalism* (2007) and Pankaj Ghemawat's *World 3.0: global prosperity and how to achieve it* (2011) illustrate the timely and relevant nature of globalization thinking.

Similar complex connectivities and networks also existed in the past, but rarely has scholarship assessed their impulse and nature through the lens of globalization explicitly. This is surprising given the evidence for the development of shared social practices between different groups, the expression of their respective identities, and the connective networks that facilitated such developments – all of which are considered key factors in today's sense of globalization. The present volume addresses this, for it is the first collection of the explicit application of globalization theory to a wide-ranging series of world archaeology case studies.

What is globalization?

Globalization is more than just another way to describe connectivity, trade, migration, internationalism, or diffusion. It has also become more than the idea of complex connectivity, as per Tomlinson's succinct definition in 1999. As case studies in this volume demonstrate, not all examples of complex connectivities in the past are necessarily examples of globalization.

Nevertheless, there is considerable disagreement about not only how to define globalization but also when it begins in world history. Many regard globalization as a post-sixteenth-century phenomenon and feel that our use of the term must encompass the world in scale (e.g. Giddens 1990; Wallerstein 1991; Robbie Robertson 2003, this volume). Other contemporary critics argue against any concept of truly worldwide engagement and suggest instead that the term and its ideas serve as a synonym for Westernization (e.g. discussions in Tomlinson 1999; Appadurai 2001b; Ghemawat 2011). For others still, it implies homogenization, standardization, and uniformity, obscuring or downplaying variation and difference (e.g. Giddens 1990; Steger 2003; Beck 2004;

Ritzer 2004). Close study of the processes that underpin the sense of global connectivity demonstrate that none is wholly accurate. Such analysis demonstrates that the idea of 'global' refers to a particular scale, often substitutes for 'international', and that it is not restricted, or even necessarily related, to Westernization (Hirst and Thompson 1996; Tomlinson 1999: 89–97; Appadurai 2001a, 2001b; Ghemawat 2011; Nederveen Pieterse 2015).

There is often no consensus on the definition of globalization, although many characterize it. It is widely agreed that one of globalization's most defining features is increasing connectivity. Specifically, it is of a type that encompasses a wide-scale flow of ideas and knowledge alongside the sharing of cultural customs, civil society, practices and the environment. This may manifest itself through closer economic integration via increased movement of goods and services, capital and labour, and it may be shaped by politics (Steiglitz 2006: 5). Many debate its features, however, such as whether it is informed by technological changes, involves the reconfiguration of states, goes together with regionalization, or includes the sense of time–space compression (Nederveen Pieterse 2015: 7–25). Usually it is described and discussed within its experiential sphere, so that we hear of different kinds of globalization, such as financial, commercial, economic, or political. Most will agree, however, that globalization is uneven and asymmetric in pace, scope, and impact. There are clear ebbs and flows of various connectivities that work in tandem economically, socially, materially, and politically. Some understand these developments as a process (e.g. Robbie Robertson and Jan Nederveen Pieterse), as a system (e.g. Jonathan Friedman and Immanuel Wallerstein), or as a discourse (e.g. Manfred Steger).

Roland Robertson defines globalization as the process by which the world increasingly becomes seen as one place and the ways in which we are made conscious of that process (Robertson 1992: 8). This should not be taken to imply that there is a unified world society or culture, however (Featherstone 1995: 114). For this reason, Jan Nederveen Pieterse defines globalization as 'a process of hybridization that gives rise to a global mélange' (2015: 67), and he argues that globalization can be understood as an open-ended synthesis of a number of disciplinary approaches to such developments, in which there are as many globalization modes as there are agents, dynamics, and impulses (Nederveen Pieterse 2015: 68).

Since there are many circumstances in which this synthesis takes place, we should really speak of processes, and globalizations. In other words, globalization itself may be defined as *processes of increasing connectivities that unfold and manifest as social awareness of those connectivities*. It is more than just complex connectivity. That it is about the processes themselves makes globalization an active concept rather than a descriptive one. The idea suggests a world-scale, which is why some argue that it can therefore only be a phenomenon that begins with the period in which we have had the means of global circumnavigation. More often the term is used to signal wider changes within a conceptual or experiential world. Most commonly, this involves increasing integration and cooperation, with evolving, facilitating commonalities. There is often also the sense that the world is shrinking because distance communication and movement are both faster and wider reaching. Of course, the world itself is not diminishing, but it seems to become more accessible physically, socially, and/or temporally to those who operate within the sphere of experience. Studies have already demonstrated, however, that neither rapid communication, mobility over distance, nor technological advancements are necessary to convey a sense of one-placeness. For the past, the feeling of one-placeness is achieved more effectively by shared practices (e.g. Hodos 2015: 249–50; Pitts and Versluys 2015).

An important corollary to the increasing senses of similarity and accessibility is the awareness, and even development, of more pronounced differences and inequalities with those not so closely integrated into the experiential sphere (or not involved at all). This corollary indicates that there are two primary aspects of globalization processes. One is the development of shared practices and values that contribute to the sense of one-placeness; these often derive from a variety of increasing connectivities. The other is an increasing awareness of and sensitivity to differences, especially cultural ones. Growing awareness of cultural difference is a function of globalization, not just a feature of it. It manifests itself often as a resurgence of local identities in explicit contrast to the increasingly shared practices of the globally connected level. That these local expressions of identity are also commonly linked to widely divergent levels of wealth, health, and political power often only serves to heighten such contrasts and the degree of social investment in maintaining cultural difference. Thus, with globalization there is a balance between shared practices that bind and diversities that distinguish participants. Indeed, cultural convergence cannot exist without cultural differentialism, since we cannot converge unless we start from divergence. The two are not only in tension with one another, but also interdependent. Together, they are part of the paradox of globalization. However, many discussions of globalization, both in the popular press and academia, pay lip service only to the former and neglect the latter.

Hybridization

One reason for this partial perspective is because there are often different notions of 'culture' under discussion. One accepts culture as essentially bounded, and assumes that culture derives from a localized, contextualized learning process (*habitus*). In this lies the notion of a cultural group. The other is the idea of a translocal learning process that involves an outward-looking sense of place. In both contexts, the notion of hybridization plays an important role (Nederveen Pieterse 2015: 87–90).

Hybridization has been defined as 'the ways in which forms become separated from existing practices and recombine with new forms in new practices' (Rowe and Schelling 1991: 231). The idea of hybridity was adopted by the social sciences from the natural sciences to characterize cultural blendings that reconfigure and develop into new practices. Its active form, hybridization, plays a role in globalizing processes as 'the making of global culture as a global mélange' (Nederveen Pieterse 2015: 86). Hybridization has often been criticized, however, for being based upon a sense of purity of the contributing parties and that it implies passive developments without agency (for an overview, see van Dommelen 2006). What is lacking in many of these critiques, however, is the historical depth that makes up cultures and the features by which we identify, categorize, and distinguish them (there are also questions about our notions of hybridity and past people's actions: did what we regard as hybrid appear as such to their agents? See Pappa 2013; Silliman 2015). Silliman notes that with hybridity, we have been overly concerned about origins and the short-term mixing of cultural elements; he argues that hybridity and hybridization are best used with regard to practices anchored in social memory and multiscalar explorations of culture change and continuity (Silliman 2015).

While hybridity may be based upon differences between the categories that go into the mixture, the process of hybridization reveals those differences to be relative. We are just as bounded by similarity as we are distinguished by difference. The two cannot be separated from one another. Furthermore, hybridity transcends binary categories. Indeed, as Nederveen Pieterse notes (2015: 125), boundaries are historical and social constructions that serve as cognitive barriers whose validity depends on epistemic orders, which are ultimately arbitrary, or at least contingent. As such, hybridity critiques essentialism. Thus, hybridization, as the active voice of hybridity, refers to a wide range of practices that involve both accident and agency. It references social and cultural strategy, rather than merely observing objects combining different technological or cultural traditions

(Silliman 2015: 288). Hybridization, therefore, is a factor in the reorganization of social spaces and practices, and it applies as much to dominant socio-cultural groups as to the less dominant (e.g. colonized; subaltern). For this reason, globalization processes can be described partly as hybridization processes, and result in something much more complex than simply homogenization.

Variability

This complex result exists because of variability: there are variations in practices that we see within any particular group. Yet despite the variability, collectively members may still identify themselves, and be identified by us, as belonging to the same group. Difficulty arises when a practice falls outside of the normal range we expect to see within the boundaries of the defined group. As a result, we spend considerable effort in explaining such phenomena in contrast to our definition of the group.

Our need to accommodate variability better when defining groups becomes significant when we assess the nature of past complex connectivities through material culture, the building block of archaeology. Awareness of others is not the same as feeling connected to them. Often literary sources are too politically administrative or positional (biased; oppositional) to indicate any such perception, and for more distant eras we rarely have personal documents that reveal individuality. Yet feeling connected surely was a feature during certain periods, especially those that included substantial mobility of individuals and groups. The challenge is how to interpret the nature of past connectivities from material culture.

This is because the convergences we experience and characterize in specifically globalization connectivities are not identically replicated practices. Instead, they are shared practices. They are based on a thread of common understanding that transcends a culture's own values, beliefs, and practices. This enables different groups to operate together at the level of the global for mutual benefit. This is not, however, a simple moving towards uniformity. If it were, we would all be the same by now. The synchronization we associate with globalizing processes is incomplete, ambivalent, and subject to agency. It also downplays counter-currents and ignores the fact that much of what is being synchronized is of mixed origins to begin with. Even the idea of a global mélange, which characterizes this complexity better as the blending of diverse elements in a specific context of use/application by involved parties, cannot fully acknowledge the unevenness, asymmetry, and inequality that happens in global relations.

Glocalization

As those globally common practices reverberate through a cultural group – in the form of new shapes, styles, or goods – social practices within that group evolve to build upon the initial thread that facilitated global-level understanding in the first place. Often, such evolutions are adapted in a way that speaks directly and explicitly to that group, which increases their appeal locally. This is the idea of glocalization, or the local adaptation of those widely shared practices and values, which appears in the convergence most popularly associated with globalization (Roland Robertson 1995).

This global-outlook-as-adapted-to-local-conditions has its origins in business micro-marketing, in which goods and services have been tailored and advertised to differentiated markets. As a process, however, it can be driven just as much by the consuming market, which chooses to use goods and practices that accord with local traditions. Conceptually, glocalization emphasizes the local responses to global engagement, and focuses on the ways in which broadly shared ideas, goods, and practices are modified and adapted locally to accord with local practice, customs, habits, and beliefs. The variability of such responses is immense, and these should not be regarded somehow as lesser or misinformed performances of global practice. Instead, they need to be regarded on their own cultural terms. Glocalization is thus an integral aspect of globalizing processes.

Grobalization

A companion to this is the notion of grobalization (Ritzer 2004). This is a more imperialistic, homogenizing perspective, as it derives directly from the ambitions of organizations, nations, and corporations to grow (hence *gro*balization) their power, influence and, in the case of businesses, profits in geographic areas. It is more focused on the expansion of producers and entities to find new locales, and thus new markets and consumers. It therefore emphasizes geographical extent and consumer opportunities, striving for homogeneity, rather than cultural impact and the variations in practice emphasized in glocalization. Conceptually, grobalization is part of the dominating aspect that we often associate with -izations, such as when globalization is considered proxy for Westernization (or Romanization, Sinicization, Islamicization, etc.). Thus, it, too, is an integral aspect of globalizing processes.

Globalization as a concept balances these competing processes of influence and response. It creates a framework in which the inter-relations of culture, power, and economics, and the diversity of actions and responses within those inter-relations, can be habilitated. These brief explanations here provide a context to the present volume, for while all of these might intrinsically be modern ideas, there is strong evidence of such practices and developments at various times in the past in regions around the world.

Globalization and the past

The widening cooperation and deepening inequality we see in today's globalization processes can be found together throughout history. But even in the past, such processes occurred unevenly temporally, unequally geographically, and unfairly socially. Not all examples of complex connectivities can be regarded necessarily as globalization. We should not expect globalization experiences in the past to be part of an evolutionary continuum. The trend towards human integration and cooperation is a dialectical process, but also one that unfolds inconsistently. Furthermore, the past is an incomplete record with biased, partial remains that give only clues to the nature of complex social interactions between individuals and groups.

Despite debates about the start date of globalization, many nevertheless acknowledge that the ideas that underpin today's globalizations are applicable to the past on different scales (including Robbie Robertson in this volume). For this reason, scholarship of the past is increasingly using globalization thinking to better interpret past connections between individuals and groups (e.g. Clark 1997; Tomlinson 1999; Hopkins 2002; O'Rourke and Williamson 2002; McNeil 2008). They draw particularly on contemporary analyses of the processes through which the world is regarded as a coherently bounded place, and the ways in which we are made conscious of this sense of one-placeness (Roland Robertson 1992; Waters 1995: 1–25; Tomlinson 1999: 1–31).

What is particularly appealing about globalization is that it rehabilitates competing, sometimes oppositional perspectives on the nature of connectivity. For instance, in the 1980s, postcolonialism emerged as a major paradigm of critical analysis. It sought explicitly to deconstruct the narratives of the colonizers, and to articulate the voices of the colonized and so-called 'others'. It impacted within archaeological discourse during the 1990s (Liebmann 2008), evidenced in the dismantling of interpretative frameworks such as Romanization and Hellenization (see the discussion between Versluys (2014) and Hodos (2014)). Hybridization became popular as a means of interpreting cultural changes during these eras, instead. However, post-colonialism has been criticized for homogenizing experiences, not acknowledging sufficiently the role of history in cultural change, and, at times, disregarding the impact of the colonists to such an extent that they are written out of the narrative altogether (for discussions, see Liebmann 2008: 10–13). Globalization thinking rehabilitates these competing perspectives. It enables us to consider the commonalities that gave rise to the -izations in the first place alongside the diverse expressions of those shared practices. It also allows us to recognize the tension between shared practices and the rejection of them, which can happen in the resurgence of local identities in contrast to the merging of practices at the global level. Globalization enables us to consider the interconnections between all these different levels of interaction in a united perspective.

To date, such studies in the field of archaeology have been patchy in terms of application. Many focus on a single cultural group or period/era (e.g. Hingley 2005; De Angelis 2013; Pitts and Versluys 2015) or a more eclectic collection of case studies (LaBianca and Scham 2006; Jennings 2011). Some regard only the evidence for long-distance contact (Harris 2007), with little consideration of the nuances of shared practices or the paradoxical resurgence of expressions of distinctive local identities (De Angelis 2013). These, in particular, use globalization simply as proxy for the similarities of practice across a particular scale. They do not consider additional aspects that make the connections and reactions complex.

In contrast, the present volume is the first to assess the shared practices, the localized differences, and the networks that underpin them. Thus, it brings together the scope of evidence for connectivities in the past. Furthermore, it takes a world archaeology approach on a multi-period basis. In some respects, therefore, the present volume on globalization is truly global.

Of course, as with the very critiques of ‘globalization’, this volume does not cover every place in every period in human history. It cannot. No volume could. But, significantly, for many of the places, periods, and social groups discussed, this volume represents the first time that their social developments have been considered through the lens of globalization and the processes that underpin it. The chapters here are not synthetic narratives of the kind usually associated with the handbook/companion model. Instead, each has been specially commissioned to provide a focused case study. Thus, one aim in the selection has been to expand the scope of application beyond the few well-known, theoretically informed archaeological examples (e.g. Jennings 2011; Pitts and Versluys 2015; Boivin *et al.* 2012). To further encourage consideration of less obvious periods and places, we also shy away from widely discussed historical examples, such as slavery in the Americas (e.g. Falola 2013), opium and trade in the nineteenth century (e.g. Schoonover 2005), or the importance of global capital markets in supporting economic growth in the modern world (e.g. Weiss 2002). Nevertheless, within the sections, which are geographically oriented, we have also sought a temporal scope from prehistory to today. The volume spans from as early as 10,000 cal. BP to the modern era; its contemporary contributions consider global trade in commodities and technologies primarily from a material culture perspective (globalization of the heritage industry, which is also touched upon in this volume, is well-discussed elsewhere: e.g. Labadi and Long 2010; Meskell 2015). Collectively, these illustrate a tremendous range of connectivities that people have experienced, and a variety of evidence for those relationships, not all of which necessarily can be considered globalization. Therefore, what is and what is not globalization are also reflected upon.

The volume begins with four introductory chapters that establish different perspectives on globalization theory and its application to the past. Jennings provides a clear methodology for recognizing globalization processes in action. Knappett explores how networks provide the tools for analysing connectivities across space and time, arguing for the social nature of these connections, beyond material and spatial ones. Feinman emphasizes the macro-scalar aspect of globalization. For Robertson, globalization remains a matter of scale that, for him, must encompass the world, and thus is an inherently modern phenomenon. Nevertheless, he acknowledges similar patterns of connectivities on smaller, local, and regional scales and recognizes that they epitomize human society. He appreciates that the theories that underpin today's thinking about globalization can be a useful tool for understanding similarly complex connectivities in the past. Thus, even within these four framework papers, the diversity of definitions and conceptualizations of globalization is illustrated.

Contributing authors were asked to engage directly with globalization theory, as raised through the following four chapters, in their reconsiderations of developments in their respective periods, places, and cultural groups. For many, this has been an exercise in original analysis and interpretation, since globalization theory within archaeology has not been widely applied to date. For this reason, authors have also often reflected back to consider how globalization thinking offers new perspectives on understanding the complex connectivities of their case studies that may be masked by alternative theoretical approaches. Collectively, therefore, this volume presents the discipline with an alternative paradigm with which to reassess the complexities and impacts of cultural connectivities in the past. To avoid any sense of a master narrative that locates a particular time period or continent as the epicentre of globalization, the sections themselves have been ordered alphabetically; cross-references to other contributions within the volume link the regions directly.

This volume has two additional aims, which address archaeology but also serve a broader purpose. The first is to illustrate the potential of globalization theory to bridge the local and global in material culture analysis. In other words, the volume highlights what globalization can do for archaeology. There are many examples from various archaeological periods in which the presence of 'exotics', 'trade wares', 'prestige items', and 'social valuables', new technologies and so on are highlighted in analyses of local settings. Such settings are often individual sites (villages or cities) or at best regional trade networks. The chapters in the present collection offer a broader reflection on the places of origin of those exotics, and the consideration of such objects as a factor in the analysis of social and cultural identities. The roles of objects and object agency in cultural change arising from connectivities come to the fore in this regard.

This, in turn, gets compared and contrasted with the role global engagement plays as a force of cultural change alongside its impact upon cultural resilience in spite of and in reaction to it. Such processes raise questions concerning how local communities responded to globalizing forces between the flexible local (cf. Ong 1999) and the friction viewed elsewhere (Tsing 2004).

The second aim is to highlight the distinction between modern and premodern globalizations as one of scale and, perhaps, intensity, rather than viewing the difference as one of kind. This is a point made by Jennings (2011), but case studies presented here illustrate this much more broadly. In other words, the volume demonstrates the significance and utility of the past to today's society and social theorists. Even though globalizing tendencies in the nation-state era are leading to more poignant forms of border crossings, cultural and natural borders were always being crossed. Diffusionist theory and World Systems Theory both make this point, but the former fails to ask 'how' and 'why' and the latter replies only through economic motifs. Globalization theory offers more room to introduce social and cultural elements into analysis of the material record of the past. This is because globalization is about processes rather than a way of being.

Therefore, other disciplines beyond archaeology can draw from the studies here. Evaluating, analysing and interpreting material evidence patterns from the past provide us with an opportunity to model the future in a unique way. Archaeology provides a long-term record of broader social practices, and a trajectory of impact that arises from the complex connectivities we do, and do not, associate with globalization. This volume draws together case studies from world archaeology that reconsider the processes and networks that underpin ideas and processes of globalization, as seen in material culture. We need to identify these phases and shifting centres of globalization in the past to understand such processes in the long term, including going forward from today. As such, examples in the present volume serve as a model for contemporary globalization analyses that seek to map outcomes of our own, current connectivities in a variety of sectors in today's society, and societies. We need the past to understand the future; archaeology provides us with a means of shaping that future as we strive to anticipate the consequences of our own connectivities today for ourselves and our children.

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1.2

Distinguishing past globalizations

Justin Jennings

Introduction

Today's globalization is a 'very modern phenomenon' (O'Rourke and Williamson 2002: 47), developed over the past 500 years via an unparalleled surge in the distance, scale, and speed of interregional interactions. Yet people have always interacted across distances, and these interactions, with many peaks and valleys, have increased in intensity over the course of human history (Wenke and Olszewski 2006). With this in mind, there has been increasing interest over the last decade in relating our era of contemporary globalization to earlier periods of intense long-distance interaction and culture change (e.g. Steger 2003; LaBianca and Arnold Scham 2006; Morley 2007; Hodos 2010; Stearns 2010; De Angelis 2013). The scholars doing this research, many of whom are contributors to this volume, join me in recognizing that there are many features that make our current era unique, but nonetheless argue against the idea of modernity as a totalizing rupture with the past (Goody 2006). Globalization, we suggest, can be traced much further back in time.

Yet is globalization – a notoriously slippery word to define (Hochschild 2006: 40) – best seen as an unending process or one that has occurred multiple times in the past (Figure 1.2.1)? Many argue that there has been only one single trend towards increasing globalization in human history. The world, following this perspective, has been slowly globalizing in fits and starts over thousands of years (e.g. Frank 1993; Clark 1997; Nederveen Pieterse 2004; Chanda 2007; McNeil 2008). A second, perhaps smaller, group argues that globalization has occurred repeatedly in the past. These scholars – often drawing inspiration from world systems research (e.g. Chase-Dunn and Hall 1991, 1997; Kardulias 1999; Hall *et al.* 2011) – suggest a more cyclical process in history within which bursts of interregional interaction were followed by balkanization. My work, while falling within this second group (Jennings 2010, 2011, 2014), stresses that not all of these bursts of interaction should be considered as earlier globalizations.

To make a compelling argument for multiple globalizations, one must confront the difficult, and thus far largely neglected, problem of clearly distinguishing what was and what was *not* a period of prior globalization. In the brief space allotted, I would like to discuss the ways that archaeologists might identify earlier globalizations, and then provide two case studies of broad stylistic horizons – Chavín in the Andes and Hopewell in the North American mid-continent – that

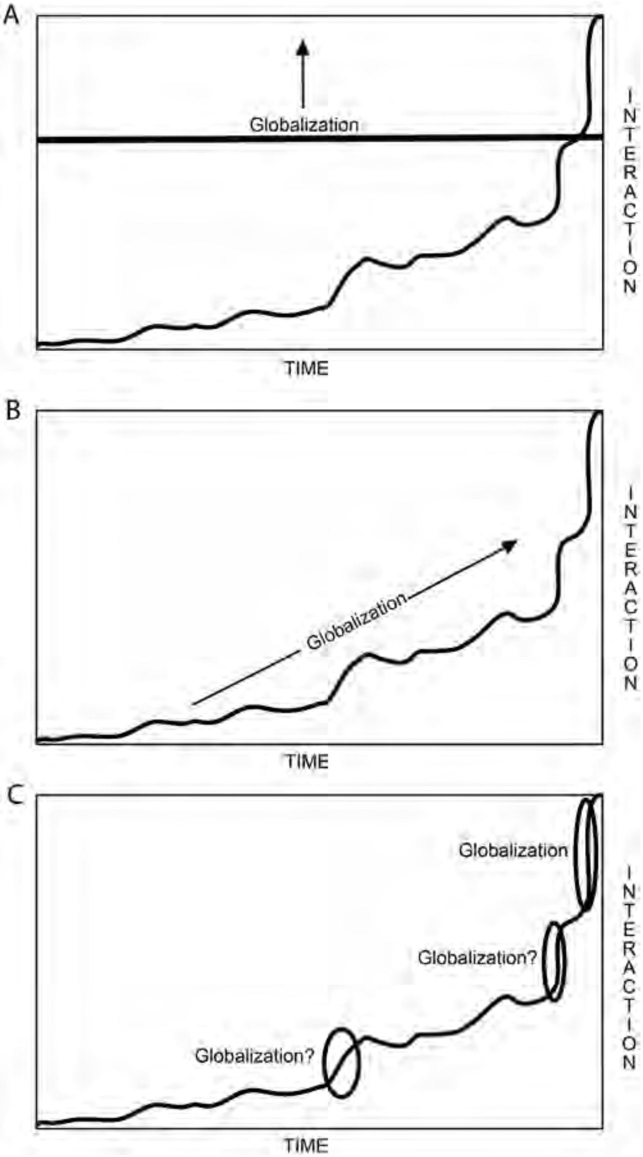

Figure 1.2.1 Different conceptions of globalization in world history as (a) uniquely modern phenomenon, (b) long-term historical trend, and (c) repeated phenomenon

were precipitated by the flow of ideas, goods, and people across wide regions. The Chavín and Hopewell horizons were both transformative, but I will argue that only the Chavín horizon meets widely held criteria for a period of globalization.

Following John Tomlinson (1999: 2), I define globalization here as complex connectivity, a condition created by a dense network of intense interactions and interdependencies between disparate people brought together through the long-distance flow of goods, ideas, and individuals. Tomlinson, echoing other scholars, enumerates a number of cultural changes associated with complex connectivity, and I argue that we can use the existence of these same changes during earlier periods of heightened long-distance interaction to determine if an earlier era achieved complex connectivity, and thus globalization (see Jennings 2011).

The cultural consequences of globalization

Identifying earlier periods of globalization, especially when dealing with regions before writing and recording systems were introduced, is problematic since strict quantitative approaches often flounder on the shoals of scattershot coverage and differential archaeological preservation. Tracking long-distance trade, for example, is a daunting task when much of this trade was in perishable materials, and many of the goods moved within informal channels (e.g. Hanks and Linduff 2009; Smith 2010). Ancient DNA, isotope analyses, and other new techniques can be used to reconstruct connections, but they still provide only a shadowy glimpse into the pace and volume of earlier human – as well as plant and animal – migrations (Lalueza-Fox *et al.* 2004; Knudson 2008; Schlumbaum *et al.* 2008). We can thus readily identify *if* people, flora, fauna, and objects were moving across the landscape in the past, yet it is virtually impossible to come up with the kinds of more precise data used to create commodity price indices, terms of trade, and the variety of other measures that economists and other scholars use to track patterns in globalization today (e.g. Chase-Dunn *et al.* 2000; Kurdle 2004; O'Rourke and Williamson 2002).

I argue that a more fruitful means of identifying earlier eras of globalization is by demonstrating a correlation between the increased flow of products and people *and* evidence for the array of cultural changes that are commonly associated with globalization. These culture changes, although perhaps more subjectively determined, are usually archaeologically visible and in aggregate provide a clearer sense than numbers of how surging interactions can impact the daily lives of far-flung groups. Drawing on the globalization of culture approach (Sklair 2006), one can identify eight closely related trends that occur in contemporary globalization. These overlapping trends, spurred by complex connectivity, create a global culture – all should be present for a period to be considered an era of globalization.

The first of the trends associated with globalization is *time–space compression*, an acceleration of long-distance economic, political, and social processes that shrinks one's experience of space and time (Harvey 1989). The world therefore feels smaller with time–space compression, and complex connectivity between groups means that changes in one place can have swift ramifications across a broad region. The internet, of course, springs to mind when we think of today's smaller world, as does the hardships felt as a result of the latest financial meltdown. Yet, the introduction of a new pack animal or the extension of a recording system has also led to significant time–space compression in earlier periods (e.g. Algaze 2008; Possehl 2007).

The second trend seen in globalization is *deterritorialization*, the sense that a place seems only tenuously connected to its local, geographically-fixed, context (Appadurai 1990; Giddens 1990). Linked to the idea of time–space compression, deterritorialization occurs as a result of foreign influences on a plethora of local practices. Cities like Mumbai or São Paulo therefore become more cosmopolitan and one result is that some residents can have more in common with people living thousands of kilometres away than they do with both their immediate ancestors and those living just outside of the city. Ancient deterritorialization is perhaps most easily seen in the high percentage and wide range of imported styles found in the material assemblages of sites during certain periods in the Mediterranean (see Parts VII and IX, this volume).

The third trend, *standardization*, occurs as people navigate ways to bridge geographic and cultural boundaries. A common way of envisioning the world is needed in order to facilitate long-distance interactions and to make the actions of all parties in a transaction comprehensible

(Anderson 1991; Wilk 1995). Universal standards of measurements, like Greenwich Mean Time or the metric system, are the most obvious examples of standardization in modern globalization, but there are also myriad ways in which people begin to share a broad set of ideas about how the world works through television, movies, and other media. Standardization can be seen in the ancient world through the spread of pidgin languages and the adoption of ideologically charged motifs into local assemblages (e.g. Pauketat 2004; Heggarty 2008).

Unevenness is the fourth trend in globalization. Interregional interaction networks are not geographically ubiquitous, and there can be considerable power differentials between regions (Wallerstein 1979; Wolf 1982; Harvey 1989). Today's rising powers like China manage to dominate many exchange relationships, while other places like Haiti remain isolated. Bollywood enjoys global influence; the Iranian film industry does not. Unevenness also occurs in the ancient world, where cities like Teotihuacan enjoyed much wider influence than other sites of its era and there was considerable patchiness in the spread of stylistic horizons (Cowgill 1997; Rothman 2001a).

Homogenization, the fifth trend, is perhaps the most discussed hallmark of global culture (Thompson 1995; Tomlinson 1999). As flows of ideas, objects, and people increase, a degree of cultural homogenization occurs as individuals come to rely on a similar suite of practices and products. Homogenization can be seen in the spread of brands like McDonalds, as well as in global changes in attitudes towards violence, beauty, and sickness. Homogenization breaks down cultural barriers but it is important to underline that such flows between cultures always involve, 'interpretation, translation, mutation, adaptation, and "indigenization" as the receiving culture brings its own cultural resources to bear, in dialectical fashion, upon "cultural imports"' (Tomlinson 1999: 84). Homogenization can be seen in the ancient world when previously distinct groups begin to build their homes or distribute food in the same manner (e.g. Alt 2001; Nissen 1988).

The sixth trend in globalization, *cultural heterogeneity*, occurs because cultural variation actually increases during these periods, despite some homogenization. Contemporary globalization is not the same as Westernization, but rather is a blend of foreign elements from throughout the network that are then indigenized into local settings (Friedman 1999; Gupta and Ferguson 2002). The particular blending of outside influences is therefore unique from one place to the next and constantly shifting as new ideas and products are introduced while others lose favour. Yoga gets reinterpreted in California studios, and hamburgers do not look quite the same in Japan. Cultural heterogeneity can be perhaps best seen in the ancient world in the differences in ceramic assemblages across stylistic horizons. One group may mix motifs from two foreign styles on local cups, while another retains traditional forms while changing the colours of slips (e.g. Clark and Pye 2006; Yépez Álvarez and Jennings 2012).

Re-embedding of local culture, the seventh trend seen in globalization, is caused by those who react to global flows of ideas, objects, and people by attempting to reassert local traditions. These traditions, sometimes invented if not recast, are often presented as a counterweight to ground communities that are in the throes of rapid culture change (Hobsbawm and Ranger 1983; Green 2002). The Académie française strives to maintain the purity of the French language in the face of neologisms, and there has been a surge in youth engagement programmes among Canadian First Peoples as elders seek to pass on traditional knowledge to the next generation. The re-embedding of local culture is the most tricky of these trends to document archaeologically, since it can often be difficult to tell if outside influences were rare or absent in a location because they were rejected by a group or because these influences were minimal. Yet, re-embedding in the past was likely occurring when we can see increasing rates of interaction paired with reassertions of previous funerary traditions, settlement organization, and other practices (e.g. Nassaney 2001; Rothman 2001b; Bélisle and Covery 2010).

The final trend is *vulnerability*. Complex connectivity leads to interdependence because of the numerous, deeply embedded connections between various groups. Events – the Russian annexation of Crimea or flooding in the Philippines – have widespread reverberations across the network, and heighten awareness of globalization's risks (Beck 1992; Eriksen 2007). Despite issues of chronological control, vulnerability can be best demonstrated in the past through the collapse of interaction networks in the ancient world. When important centres like Rome or Knossos falter, a more globalized exchange system will tend to break apart into smaller, more manageable, ones (Knappett *et al.* 2011; Sommer 2013).

Non-local connections are commonplace throughout history, and these connections are often associated with some of the same kinds of cultural changes that are seen with contemporary globalization because these flows also bridge geographic, historical, and societal divides (e.g. Abu-Lughod 1989; Gordon 1992; Wolf 1982; Gupta and Ferguson 2002). Yet I argue that not all periods of surging long-distance interaction should be seen as globalization eras – in many cases the particular nodes and links in the interregional exchange network did not come together to achieve complex connectivity – since the eight trends seen in modern globalization cannot be documented in some cases. For instance, the Chavín horizon is an example of an era of globalization; the Hopewell horizon is not.

Chavín and the Early Horizon

Beginning in the 1920s, Julio C. Tello advanced an argument for an Andean mother culture that diffused out of the site of Chavín de Huántar to encompass a region of the Andes stretching from Ecuador to Argentina (1948). Tello's argument regarding the timing, extent, and nature of Chavín's influence proved incorrect, but scholars nonetheless now recognize that Chavín de Huántar was an important ritual and urban centre in the interregional interaction network that created the Early Horizon Period (800–500 BC) (Burger 1992, 2008; Rick 2008; Rick *et al.* 2010) (Figure 1.2.2). Long-distance exchange surged during this period, and there was a wide sharing of technology, foodstuffs, and iconography. All eight of our cultural trends also occurred during the Early Horizon – Chavín is therefore an example of ancient globalization.

Chavín de Huántar, located in the sierra of northern Peru, was home at the end of the first millennium BCE to a few hundred people clustered around a small temple complex (Burger 1992; Kembel 2008). The site would grow tenfold between 800 and 500 BCE, and the temple radically expanded during this time to include sunken patios, platforms, and underground galleries (Rick 2008). The meteoric growth of Chavín can be correlated with the expansion of temple centres in both the sierra and on the coast of Peru, where residents seemed to have shared an underlying cosmology (Figure 1.2.3). Chavín de Huántar was a particularly cosmopolitan place during this period of intensifying interaction, attracting visitors from hundreds of kilometres away to participate in feasts, watch processions, and leave offerings (Druc 2004; Druc *et a*l. 2001; Rick 2008).

The leaders of Chavín de Huántar, like those in other Early Horizon centres, sought to institutionalize the period's growing differences in wealth, privilege, and power (Burger 1992; Kembel and Rick 2004; Rick 2005). They did so by arguing that they were different – somehow closer to the gods – through performances, iconography, and, most importantly for our purposes, long-distance connections. Chavín's leaders helped to radically expand the use of llamas for long-distance exchange (Burger 1992); and new trade connections resulted in an unprecedented increase in the flow of obsidian, cinnabar, marine shells, and other goods to Chavín, as well as to other centres (Contreras 2011). Chavín's previous connections had been with

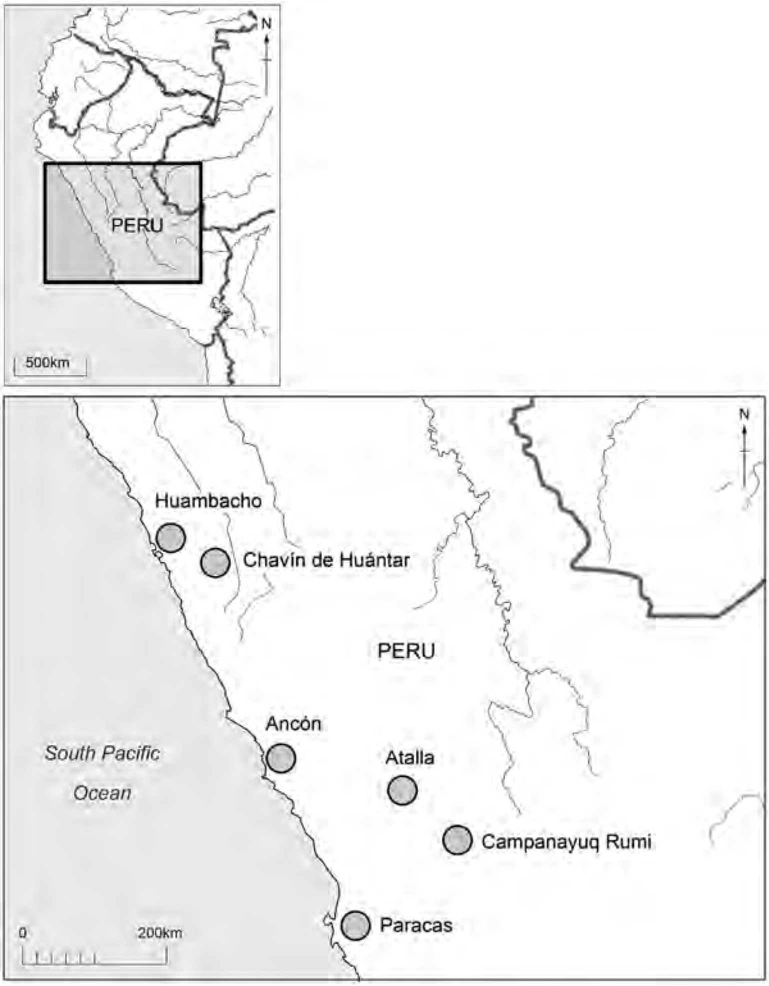

Figure 1.2.2 Chavín-related sites mentioned in the text — the inset map shows where the area is located within Peru

other northern highland groups and, to a much lesser extent, those living on the northern coast (Contreras 2010). These links intensified after 800 BCE, and the spread of Chavín influence pushed considerably southward.

The site of Campanayuq Rumi, for example, was located in the sierra of southern Peru near the three major obsidian sources that were used at Chavín de Huántar. The site's architecture, ritual practices, and material assemblages changed radically after 800 BCE, reflecting a deep emulation of Chavín practices (Matsumoto 2012; Matsumoto and Cavero 2010). Another southern centre near a cinnabar source, Atalla, boasts ceramics almost stylistically identical to those found at Chavín during the Early Horizon (Burger and Matos Mendieta 2002). In the Paracas Peninsula on the south coast – an area long coveted for its supply of bird guano – there was a radical shift towards Chavín-inspired iconography and the introduction of new weaving

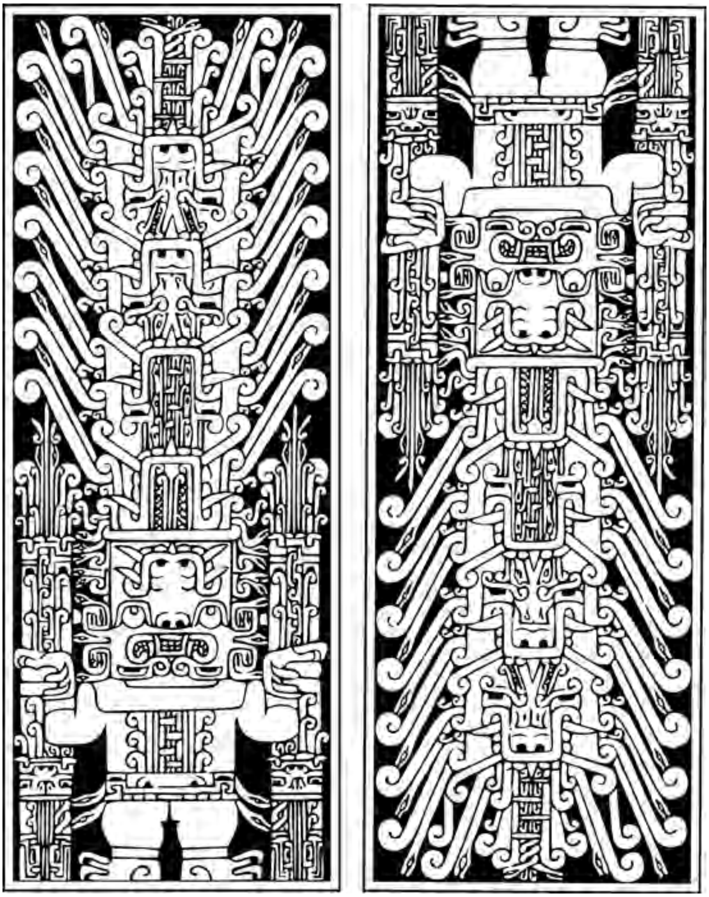

Figure 1.2.3 Illustration of the Raimondi Stone from Chavín de Huantár — the stone, depicting Chavín's supreme deity, displays some the artistic conventions used during the Early Horizon. One convention is that the art is organized so that certain attributes are made more legible by inverting the stone as is done here (source: Toribio Polo 1900: 83)

technologies (Garcia 2010; Splitstoser *et al.* 2010). Colonization from Chavín de Huántar seems unlikely in these or in other known cases, but the increased interaction during the Early Horizon was leading to profound culture change in places that were sometimes more than a thousand kilometres apart.

Chavín iconography, in particular, was being championed by rising elites (Burger 1993). They had the most to benefit from the ideology's core message of social distinction, and as time went on they developed a self-reinforcing elite culture that criss-crossed a large swathe of Peru. Yet, importantly, there were many groups who 'appear to have consciously avoided being drawn into the sphere of interaction associated with Chavín' (Burger 2008: 699). Life in the Nepeña Valley of the north coast, for example, changed dramatically in the Early Horizon – maize was introduced, there were 'significant shifts in feasting equipment,' and social distinctions widened (Chicoine 2011: 436). These changes were driven at least in part through the period's increasing interregional interactions, but many of those living at Huambacho and other ritually important centres in Nepeña chose to produce a material culture that was often conspicuously different from that being developed at Chavín de Huántar (Chicoine 2006, 2011).

Chronological uncertainties at Chavín de Huántar, as well as at other centres, make it difficult to pin down the exact scale of the site's impact on Early Horizon interactions (Burger 2008; Kembel 2008; Rick 2008; Rick *et al.* 2010). Yet at the very least, Chavín was a *primus inter pares* among centres engaged in a wide ranging exchange of ideas, products, and individuals (Kembel and Rick 2004). The eight cultural trends that occur during periods of globalization can be found during the Early Horizon. Time–space compression, for example, can be seen in the increased emphasis on long-range llama caravanning. Geographic boundaries were eroded by these caravans – this is most easily seen in the spike in both the distance and volume of the obsidian trade (Burger and Glascock 2009) – and deterritorialization occurred in some places as people adopted a Chavín-inspired way of life that departed significantly from earlier practices.

The other globalization trends that were identified earlier in this chapter also appear to have been present in Early Horizon Peru. We see homogenization in terms of the spread of Chavín motifs and underlying cosmology, but there is also considerable cultural heterogeneity in how these motifs were incorporated into the ceramics and friezes of different sites. Standardization is evidenced by the 'specific religious experiences generated by similar ceremonies' at widely separated locales (Matsumoto 2012: 757); unevenness can be seen in those places in between where the lives of hunter-gatherers and small-scale horticulturalists changed little, even as long-distance caravans moved through their territory. Re-embedding of local cultures is manifest in Nepeña and other well-connected valleys like Cajamarca, where people chose to maintain local traditions seemingly to voice their opposition to introduced Chavín ideas. Vulnerability can be seen in the end of the Early Horizon, as Chavín de Huántar and other centres went into a precipitous decline at around the same time when violence increased, long-distance trade plummeted, and the Chavín horizon was replaced by 'a plethora of distinctive local styles' (Burger 1992: 228).

The Hopewell Interaction Sphere

In 1964, Joseph Caldwell and Stuart Struever coined the term 'Hopewell Interaction Sphere' in independent publications to draw attention to the circulation of ideas, raw materials, and, to a much lesser extent, artefacts that linked together groups living in a wide region of eastern North America during the Middle Woodland Period (150 BCE– 450 CE). These long-distance links, when combined with limited migrations (Bolnick and Smith 2007), are still widely seen as constitutive – creating an identifiable, if very loosely defined, Hopewell tradition that was reaffirmed through rituals and other activities that took place in and around burial mounds and geometric earthworks (Carr and Case 2006; Charles and Buikstra 2006; Abrams 2009). The specific mechanisms that connected people with each other, unclear during Struever's day, are only now coming into sharper focus (Carr 2006a), allowing us for the first time to evaluate if Hopewell can be classified as an era of globalization.

Families during the Middle Woodland Period lived in many small, dispersed farmsteads that depended on hunting, gathering, and horticulture for subsistence (Pacheco and Dancy 2006; Yerkes 2006; Pacheco 2010). They periodically came together into larger groups at ritually charged locations where individuals buried their dead, made offerings, and built monumental earthworks (Figure 1.2.4). Some of these locations were of only local importance, but other sites seem to have repeatedly drawn people together from across broader regions (Bernardini 2004; Carr 2006b). The largest of these gatherings may have involved world renewal rituals that assembled community leaders from hundreds of kilometres away (Carr *et al.* 2006; Byers 2011).

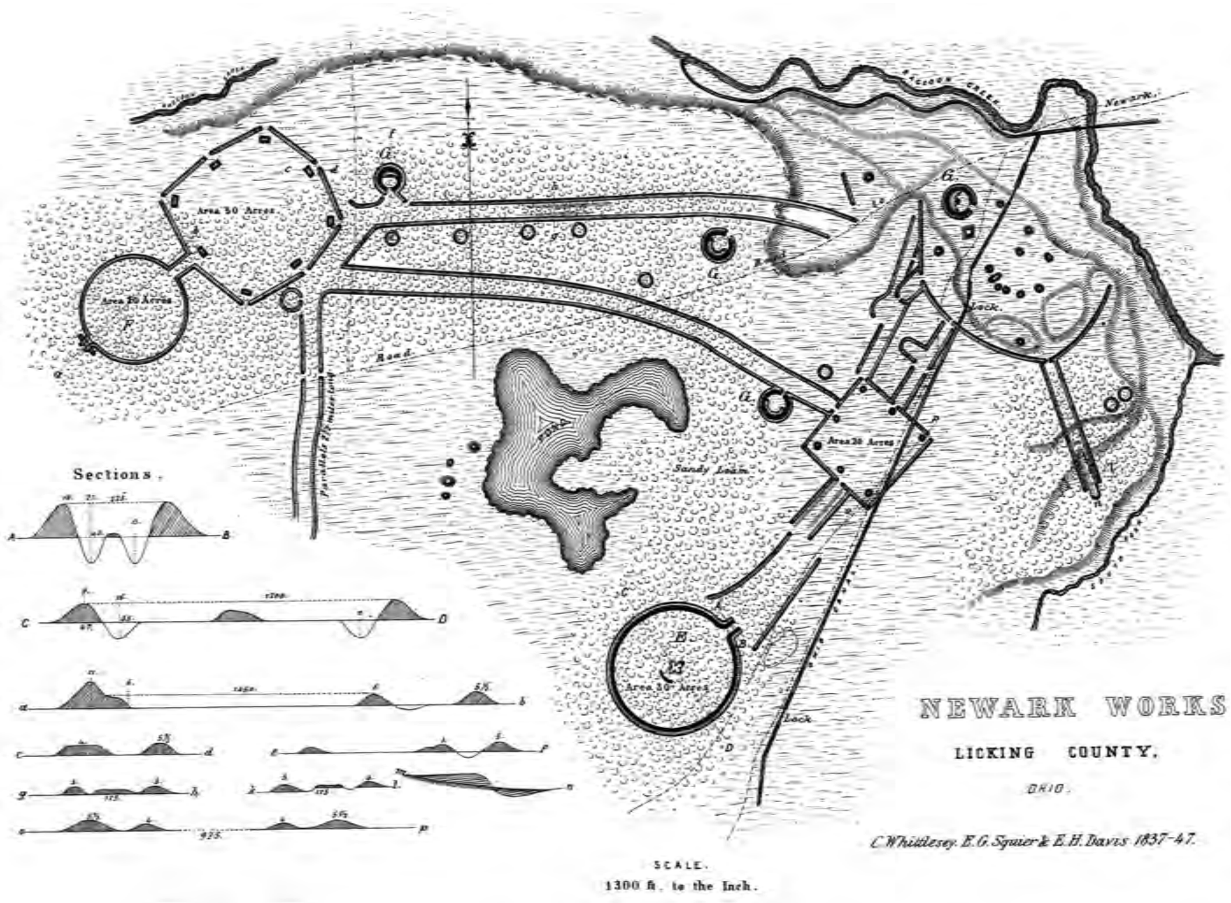

Figure 1.2.4 The mounds and causeways of the Newark Earthworks in Ohio, one of the more famous examples of Hopewell monumentalism (source: Squier and Davis 1848, plate XXV)

The people that came to these ritual centres stayed for a few days, building temporary housing, and, based on the debris left behind in these contexts, spending much of their time feasting and manufacturing offerings from exotic materials (Burks and Pederson 2006; Abrahms 2009). The burial mounds were revisited to commemorate the dead, but many of the earthworks were one-offs, where 'the act of creating something was the critical event' (Bernardini 2004: 350–51).

Hopewell mounds sometimes contained a bewildering range of material that seems to have been used to signal local, regional, and interregional connections (Seeman 1979, 1995). Some of the far away items like Yellowstone obsidian may have been obtained in a harrowing, once-in-a-lifetime journey across the continent, while other objects like bear's teeth and pearls may have suggested familiarity with the dangerous or unknown (DeBoer 2004). The mounds also often contained a mixture of nominally pan-Hopewell artefacts – copper celts, earspools, figurines, panpipes, and platform pipes – that shared some features, but stylistic and compositional analysis suggest the existence of an array of related regional traditions with little long-distance exchange of these objects and often direct procurement of raw materials by each group (Bernadini and Carr 2006; Kellar and Carr 2006; Ruby and Shriner 2006; Ruhl 2006; Turff and Carr 2006).

These data suggest that the people that came into a ceremonial site usually assembled their own raw materials and then used them to create a collection of Hopewell material that was broadly similar across the mid-continent but varied significantly from one place to the next in style and function. Hopewell was thus a collection of loosely linked societies that shared 'some very basic, shared philosophical-religious concepts' (Carr 2006b: 619). Most of these concepts *predate* the Middle Woodland Period, with the Hopewell styles being a widely accepted means through which these concepts could be materialized. The upwelling of long-distance interaction at this time can be linked to the increase in the scale of mortuary mounds and earthworks that drew together much larger groups of people when compared to the previous Early Woodland Period.

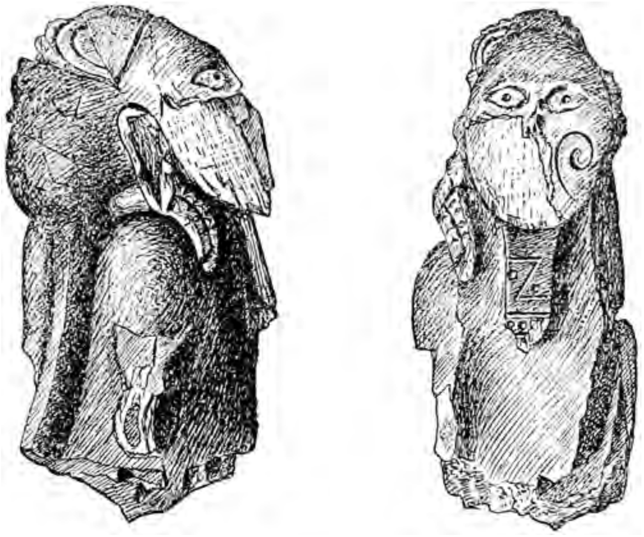

Figure 1.2.5 Human effigy excavated from one of the altar deposits in Mound 25 of the Hopewell site. The figure may represent a shamanic leader (source: Moorehead 1922: 169)

The leaders that organized activities at ritual centres did so in different ways (Coon 2009), though building from a shared shamanic world-view that used altered states of consciousness to visit distant and supernatural realms (Brown 2006; Romain 2009). Many of the items found in the richest Hopewell burials may have belonged to elaborate costumes bedecked with symbols of the shaman's power (Figure 1.2.5). The exotica spoke of distant lands, the jingle and sparkle of metal and beads simulated flight, and the imagery emphasized the importance of human/animal transformations and the structure of the cosmos (DeBoer 2004).

Shamans made 'the extraordinary palpable' for the rest of society (DeBoer 2004: 101), and these individuals and their retinue may have occasionally travelled to both distant resource areas and other ritual centres in the pursuit of sacred knowledge (Carr 2006b). Particular centres likely grew in prestige based on the perceived powers of their shamanic leaders, and then these sites would decline in importance soon after their deaths. Two particularly influential leaders were buried at the eponymously named site of Hopewell in Ohio with 62 small copper celts that were likely brought by dozens of leaders from other ritual centres who travelled to the site to say goodbye (Bernardini and Carr 2006: 641–42). Trips like these would have been instrumental in diffusing the corpus of Hopewell imagery and practices. Shamans returned with new knowledge, and then they re-imagined this knowledge to meet local contexts.

The Hopewell phenomena connected groups together from across a wide region of North America. Some goods travelled more than 15,000 kilometres across geographic and linguistic barriers; people walked and rode canoes for days to build earthworks, dance, and feast with strangers (Bernardini 2004). With these interactions, we see the pale echoes of globalization in the tension between stylistic homogeneity and heterogeneity and the attempts to re-embed local traditions. Yet, there was no creation of a global culture. Instead, Hopewell might best be considered as composed of a series of discrete, often competing, interaction spheres that were largely local in their focus (Pacheco and Dancy 2006). The shamanic leaders at the heart of these spheres were often in contact with each other, but they tended to act independently. Each group sought their own exotica, and each took pains to make their particular variety of Hopewell palatable to constituents that were largely divorced from the mid-continent's more distant linkages.

There are few indications in Hopewell of the byproducts of complex connectivity. Little standardization can be seen; there is limited homogeneity, and even less deterritorialization, vulnerability, and time–space compression. Complex connectivity failed to occur largely because a fundamental aspect of Hopewell cosmology was about engaging with the faraway and the unknown. Leaders therefore often actively avoided, or even resisted, the globalizing tendencies of long-distance interaction. The journey to an obsidian source in the Rocky Mountains, for example, was just as important as the material itself, and therefore there was little incentive for developing down-the-line exchange mechanisms – the power of obsidian was based in large part on its scarcity. The arrival of foreigners added cachet to a funeral *because* they looked and acted so foreign. Since the barriers to communication between groups were integral to shamanic positions, there was an ongoing desire to accentuate differences even as the more influential centres were increasingly bridging these divides on a more regional scale (e.g. Seeman 1995; Fie 2006). The end of Hopewell, at least in part, can probably be linked to the limited homogeneity and standardization that occurred despite these barriers. Shamanic power declined as the wider world became more familiar.

Long-distance interaction and globalization

People, ideas, and products have flowed across vast areas throughout much of human history (McNeil 2008). These flows have all been globalizing in that they seem to lead inevitably towards a similar suite of cultural changes as people negotiated their relationships with the outside world. Faint reminders of our contemporary interconnected world can thus be seen in the similarities of Venus figurines across Paleolithic Europe or in the first South Asian bead found in the settlements of West Africa. Yet treating the past as just an undifferentiated prologue to contemporary globalization risks obscuring the deeper rhythms of history (Marcus 1998). The level of long-distance interaction across regions has risen and fallen over the centuries (see Figure 1.2.1). Of the more intense periods of interaction, some – but significantly, far from all – meet the same cultural criteria used by scholars to distinguish our contemporary era of globalization (Sklair 2006; Ericksen 2007). I argue that only those periods that meet these criteria should be considered earlier globalizations (Jennings 2010, 2011).

As the budding sub-field of archaeological network analysis is demonstrating (Knappett 2013, this volume), all interaction networks were not the same. Differences in number, depth, and kind within the linkages connecting people mattered, and only in some cases were long-distance relationships profound enough to create the complex connectivity that leads to the formation of a global culture. Some of the specific linkages within the Hopewell and Chavín spheres can be accurately traced through material and stylistic analyses, but, at least for now, the existence of complex connectivity – and hence globalization – can be gauged most effectively through monitoring the ways in which people changed their behaviours during these periods as they became increasingly entangled with the Other (i.e. Hodder 2012; Dietler 2010).

The Hopewell and Chavín examples, like many of the other, more fully rendered case studies discussed in this volume, demonstrate the dual homogenizing/heterogenizing impulse common to interactions that transgress cultural and geographic boundaries. Yet in the case of Hopewell, the people that enjoyed the most cross-cultural linkages – the shamanic leaders of the various mounds – were dedicated to limiting these linkages in order to better maintain the mystique of their positions (Carr 2006b). Chavín de Huántar and other Early Horizon temple centres were in some ways similar to Hopewell complexes in that they were pilgrimage sites whose leaders suggested privileged access to the sacred and exotic. Yet, Chavín centres were more outward facing – exotica found its way into more homes, as did new ways of making textiles, forging metals, and eating meals (Burger 1992). The leaders of Chavín de Huántar either allowed, or perhaps more accurately were unable to curb, accelerating entanglements with a far-flung network of ideas, objects, and people. Hopewell leaders were able to effectively short-circuit the movement towards globalization by restricting access to exotic goods and knowledge. This was not the case with Chavín, and the incorporation of a wide group of people in Early Horizon interaction networks made globalization possible.

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1.3

Globalization, connectivities and networks

An archaeological perspective

Carl Knappett

Introduction: '-izations'

'Globalization', ironically, need not be worldwide. At least, this is a necessary convenience in its current definition, as it would be hard to establish definitively if and when every corner of the globe is connected. And this being the case, 'global' becomes a little less important in globalization's definition than does the idea of 'complex connectivity' (Jennings 2011: 2, citing Tomlinson 1999: 2). With complex connectivity, interactions have to be intense, forming dense networks – and they have to be between different regions and have the capacity to trigger social change if they are to be reckoned as globalization (Jennings 2011: 2). Given this set of features, one can see how archaeologists and historians have found it justifiable to take the idea of globalization back into the past, as there are many scenarios that fit the bill, as long as the 'global' aspect does not have to be taken too literally (e.g. Morris 2005; LaBianca and Scham 2006; Hodos 2010 and this volume). So we can now read of ancient globalizations from Rome (Versluys 2014) to the Andes (Jennings 2011 and this volume), and this move certainly has a lot of promise for strengthening cross-cultural approaches, and breaking down 'the great wall' between ancient and modern civilizations (Jennings 2011: 3).

What then is the advantage of calling a process of complex connectivity 'globalization' if it doesn't really have to be fully global? It is a move that says not everything *has* to be connected, but everything *could* be. And if everything under the sun is up for grabs, then there is no a priori starting point – no assumed 'core' from which one then traces zones of influence and hence peripheries. This is very liberating for cultural analysis, because it allows a move away from civilizational histories that emphasise boundaries and boundedness, no doubt under the influence of our modern nation-states (Flood 2009: 2). With the focus instead on the cultural entanglements created by constant mobility and connectivity, we create much more dynamic and emergent histories. This flattening effect in globalization thinking is basically achieved by putting all 'cultures' for analysis in 'one single cultural container' (Versluys 2014: 12). So for the Roman world, for example, which is Versluys' focus, one does not start at Rome as the core and work out – one treats the entire world touched by Rome as a zone of intra-cultural, rather than inter-cultural, connectivity. The 'globe' is not the scale of this container, but perhaps Eurasia is – and so a centralizing term like Romanization is quite inaccurate in fact, and is currently resisted by many Roman specialists. Still, a more decentring term like 'Eurasianafricanization' is unlikely to catch on. So perhaps Romanization 2.0, as Versluys calls it, simply has to recognize itself as a decentred phenomenon – just as we should not get too hung up on the global in globalization, likewise for the Roman in Romanization.

And one reason why Romanization continues to have some efficacy as a term is that it conveys very well the notion that the social changes effected by this dense, widespread complex connectivity *unfold over time*. So globalization thinking is highly useful in both spatial and temporal dimensions. Processes of '-ization' develop over space and through time. The way in which globalization thus combines space and time, geography and history, is particularly powerful, although arguably this power has not been harnessed sufficiently. It seems that these two dimensions are more typically separated in scholarship – along the lines of the roots/routes dichotomy, in fact (Clifford 1997; Friedman 2002; Flood 2009). Let me try to explain how this happens, and why it is ultimately unnecessary, if entirely understandable.

First, let us think about the spatial connectivity component of globalization – which is typically grasped through the idea of the 'network'. This is often used as a metaphor rather than as a specific model or means for analysis. It is very compatible with globalization thinking, because it allows that 'flattening out' mentioned above, and is sufficiently flexible to let us imagine many different kinds of entity connected up in lots of different ways, be it socially, economically or technologically. Scholars of the ancient world keen on globalization thinking have also recently argued that what studies of ancient globalization need are networks (Jennings this volume; Hodos 2014), though as yet there has been little explicit uptake of network analysis. Some scholars using globalization to think with have gone quite deeply into network thinking, without utilizing network modeling or analysis (e.g. Malkin 2011). Others have done a great deal to study interactions and connectivities inter-regionally and over the long term without finding any particular need to speak of globalization (Broodbank 2013). But I would argue that a number of archaeologists are already quite a way along the path towards this merging of globalization and network concerns, even if not yet expressed like this. Barbara Mills and colleagues (2013), Søren Sindbæk (2013), Anna Collar (2013), Fiona Coward (2013) and Shawn Graham (2014), among others (see contributions in Knappett 2013, 2014a), have been studying inter-regional interaction using network analysis to achieve many of the same effects as those desired by those advocating globalization ideas. Arguably, network analysis does everything that globalization thinking does. But globalization is inherently macro-scale, and so is more specific than 'network', which can apply to a range of scales, from neural networks to entire ecosystems.

Another sense that 'globalization' conveys inherently that 'network' does not is emergence. So this takes us to our second point: the emergent quality of globalization; how it unfolds over time. 'Networkization' might do the job, but nobody uses this of course – and so to many observers 'network' seems quite static, especially if they are imagining railway networks, or the network visualizations that are so commonplace. Thus, network methods are commonly conceived as too static for getting to grips with change, and so scholars have sought other registers that they believe capture change more aptly. One of these is 'meshwork', proposed by Tim Ingold in direct challenge to network, and specifically for its capacity to convey movement, flow, and emergence (Ingold 2007, 2012). We also have 'entanglement', which came to prominence in part through globalization debates, especially following Thomas (1991), and then in archaeology (e.g. Dietler 1998, 2010; Silliman 2005; Martindale 2009). However, it is in the hands of Ian Hodder (2012) that the idea of entanglement has come to show its worth in explaining temporal emergence over the long term. Hodder, too, shows a reluctance towards networks, though somewhat more ambivalently than Ingold, for what he calls their inability to convey the 'stickiness' of thing–thing relations.

Network tools

Actually, these are misconceptions, because networks are invariably dynamic and emergent, even if these properties are not transparent in the term itself. While I find entanglement and network perspectives quite compatible, and one need not have to choose one over the other, we should perhaps guard against the division of temporal and spatial dimensions of globalization, to the point where they end up with different approaches or methodologies. I argue here that networks can provide what globalization theory needs – providing the *tools* for analysing not only connectivities across space, but also their emergent properties through time. While globalization applied to ancient societies does the important heuristic work of encouraging us to think about mobility and connectivity, networks take us a step further, allowing us to both model and analyse data (Östborn and Gerding 2014). The single 'container' idea of globalization (Versluys 2014) is easily managed with networks, flattening out the hierarchical assumptions left over from core–periphery thinking. Network analysis can be multi-scalar, and so work across levels from local to global, another key facet of globalization thinking. Contrary to some common criticisms (e.g. Walsh 2014), networks can certainly capture emergence and change (e.g. Padgett and Powell 2012). More specifically, a series of network properties can be modelled and measured, such as centrality, tie strength and clique formation. These have been the focus of a great deal of research, in both social network analysis (SNA), and complexity science (e.g Wasserman and Faust 1994; Scott 2000; Newman *et al.* 2006). What the formal study of such properties allows is a richer cross-cultural analysis – a move that has been slow in coming in globalization debates – which would then mean we could actually start comparing different ancient globalizations, such as Romanization and Mediterraneanization, rather than just stating that they are all the result of complex connectivity and dense networks.

If we can start using some network measures to assess some of the details of ancient mobilities and connectivities, then we can move away from a position where the latter are little more than ciphers enabling the assertion of globalization as a spatio-temporal process. But what network measures would be most appropriate for studying ancient globalizations? If our first reaction (as archaeologists) is to think of the long-distance, inter-regional nature of globalized connectivities, then we may all too easily view ancient '-izations' as spatial phenomena – maps of the Roman empire, for example, coming to mind. We should try to resist such knee-jerk cartographic thinking – even though much archaeological evidence is material and spatial rather than directly social (see Knappett 2014b), we should still try to remember that ancient networks were fundamentally social, economic, political or religious too. So when we consider these inter-regional mobilities, we really need to have the social nature of the connections very much in mind too. And what are long-distance social connections typically like? What should we expect of inter-regional connectivities in the past? Well, there are a few different ways we might think about them – and we can break them down into frequency, strength, content and directionality.

First, with what frequency were connectivities maintained across distance? We might imagine connections over long distances to have been typically infrequent, at least relative to the contemporary world. Although we should be wary of simplistic assumptions about levels of mobility in the past, there were nonetheless certain infrastructural limitations at different times. So, in the Mediterranean, travel across maritime space would presumably have been relatively restricted before the invention of the sail. Second, we should consider the strength of connection too – which is different to frequency. A strong tie may be infrequent, and vice versa. We might typically expect strong ties to be local ones, and weak ones to be over distance. This is not to say, however, that such weak ties are unimportant – indeed, for certain purposes they may be very powerful, as argued by Granovetter (1973) in a classic paper on the 'strength of weak ties' in facilitating network navigability. This idea has also been connected with the notion of 'small world' networks (Watts and Strogatz 1998), whereby only a few random connections are needed to create global network navigability across an otherwise clustered set of local connections. If we then think of globalized entities as 'small worlds' (Malkin 2011; see also Tartaron 2013), then we should probably expect the long-distance links to be weak. But in certain cases, ancient globalizations seem to generate quite strong inter-regional connectivities (e.g. Collar 2013). And there are some network studies suggesting that the ties holding global networks together need not be weak (see White and Houseman 2003). Moreover, we should take ourselves back to Jennings' comments concerning the definition of globalization: intense interactions forming dense networks (Jennings 2011: 2).

This question over the relative strength of long-distance ties brings up a third important area, which is the *content* of ties. As long ago as 1973, Granovetter warned against an excessive focus on tie strength at the expense of tie *content*. That is to say, we should ask what was actually moving or circulating through these ties – what kinds of matter, energy or information? Asking about tie content raises the issue of what motivates social mobility and connectivity in the first place. It is very easy in network analysis to take a particular network structure for granted, and then analyse the functions that take place on that network. But network structure evolves for some purpose, probably but not necessarily correlated with its current functionality, and so we need to pay attention to what an ancient network, or ancient globalization, is *for*. In other words, *why* connect across distances? It seems like an obvious consideration, but it is curiously easy to overlook. It is important to ask because network connections are not without cost – and so we must assess what the benefit would be in establishing and maintain a link. If we do observe many long-distance links of some strength in a given network, then we must ask what purpose they serve for whichever protagonists were investing in them. One means for assessing tie content, in archaeological contexts at least, could be to focus less on artefactual proxies, and more on the actual practices or praxeologies that appear to be shared through inter-regional connections (see contributions in Kiriatzi and Knappett 2016).

The fourth feature of network connectivities to consider here is *directionality*. Does a given node have links both coming in and going out? Are the flows of matter, energy and information unidirectional or multidirectional? This relates to the content and purpose of connections of course, and it may be that the directionality in a network could reveal aspects of its function. Do all nodes in a network have an equal interest in and contribution to the network function as a whole? Or are some nodes conspicuously more involved than others?

By highlighting frequency, strength, content and directionality as features of network connections, we give ourselves some scope to assess and compare ancient globalizations. Of course, comparison is quite possible without formal network measures, as Jennings has shown, helped by Sklair's identification of eight 'trends' in globalizations (Sklair 2006). Jennings also very helpfully highlights in this volume that not all instances in the past of long-distance connectivity quite qualify as globalization, as he argues is the case for the Hopewell interaction sphere. A further advantage of using these variables to assess networks is that none of them restricts us to searching for ancient globalizations at a particular scale. Bevan (2011) in his review of Jennings' book quite justifiably raises the matter, noting that Jennings' case studies tend to span about 1,000 km. Is there a typical ancient scale for globalization? Or can we use this same umbrella term to compare phenomena at scales ranging from the Roman empire to Cahokia, for instance? How does it help to call both of these 'globalizations'? Well, scale is not the main concern – as long as the distances are in some sense 'inter-regional' (and this must also be relative, based on technologies, and difficulty of travel), then we can still compare them in terms of the frequency, strength, content and directionality of their ties and anticipate finding quite some variability in their scale, duration and purpose.

Minoanization as globalization?

What I would like to do at this point is take an example from the ancient Mediterranean that, as far as I know, has yet to be seriously considered as an ancient globalization. It concerns the phenomenon often referred to as 'Minoanization', artfully defined by Broodbank (2004: 46) as:

> a modern term of sometimes deceptive convenience for a heterogeneous range of ancient material culture traits and practices that indicate the adoption in places beyond Crete, through whatever means, of ways of doing things that originated directly or indirectly within that island.

I say 'artfully', because with the term 'through whatever means' he delicately sidesteps the polarized debate between those who believe in a Minoan colonization of the Aegean, and those who favour a more bottom-up process of acculturation. Regardless of these different views, what one can say is that most specialists do look at this phenomenon in terms both of *inter*-cultural interactions – because the Minoan, Cycladic, Helladic and Anatolian cultures do look quite different, and have deep, distinct 'civilizational histories' – and with a definite sense of a directionality emanating from Crete, even if its exact character is debated. The term itself makes these assumptions hard to avoid. We could try to abandon using 'Minoanization' altogether, though I feel this would run into the same problems as trying to abandon 'Romanization' (see Versluys 2014). Another option would be to change the terminology so it would better reflect the total container within which interactions were occurring – and so perhaps 'Aegeanization' would be more apt (though this does overlook interactions with Egypt, for example). This is perhaps as likely to catch on as 'Eurasianafricanization' is as a replacement for Romanization. A third option would be simply to retain the term Minoanization while remaining vigilant as to the assumptions it brings with it.

More important than the term we use is what we do in terms of analysis – and so what we should try here is to make the entire Aegean 'the container' for analysis, in order not to take Crete as our starting point or 'core'. So we should simply take the Greek mainland, the Cyclades, the Dodecanese, coastal Asia Minor, the northeast Aegean and Crete, and see what kinds of connections we can detect between these different places, in terms of their frequency, strength, content and directionality. Moreover, we mentioned above that networks can quite readily incorporate the temporal dimension too, and fortunately so can the evidence from this region – we can, for example compare the before, during, and after of Minoanization, to see how this candidate for ancient globalization emerged and developed.

Phase 1: Middle Bronze Age, *c.*1950–1750 BCE (MM I–II)

This is essentially a phase of contact between all of the regions mentioned above, though seemingly at quite low levels (Figure 1.3.1). The evidence for the first use of the sail in this area is really only iconographic, but what we do have points to a date around 2000 BCE (Tartaron 2013: 53) – which means that this innovation could have been in part responsible for this phase of contact.

Cretan pottery is found at various sites in the Aegean, such as on the Cycladic islands of Kea (Abell 2014), Melos (Hood 2007) and Thera (Nikolakopoulou forthcoming), on Aegina in the Saronic Gulf (Gauss and Smetana 2007), at mainland Greek sites like Lerna (Zerner 1993), in the east Aegean on the Dodecanesian island of Rhodes (Marketou 2009), on the Anatolian coast at Miletus (Niemeier 2005), and even up into the northeast Aegean on the island of Samothrace

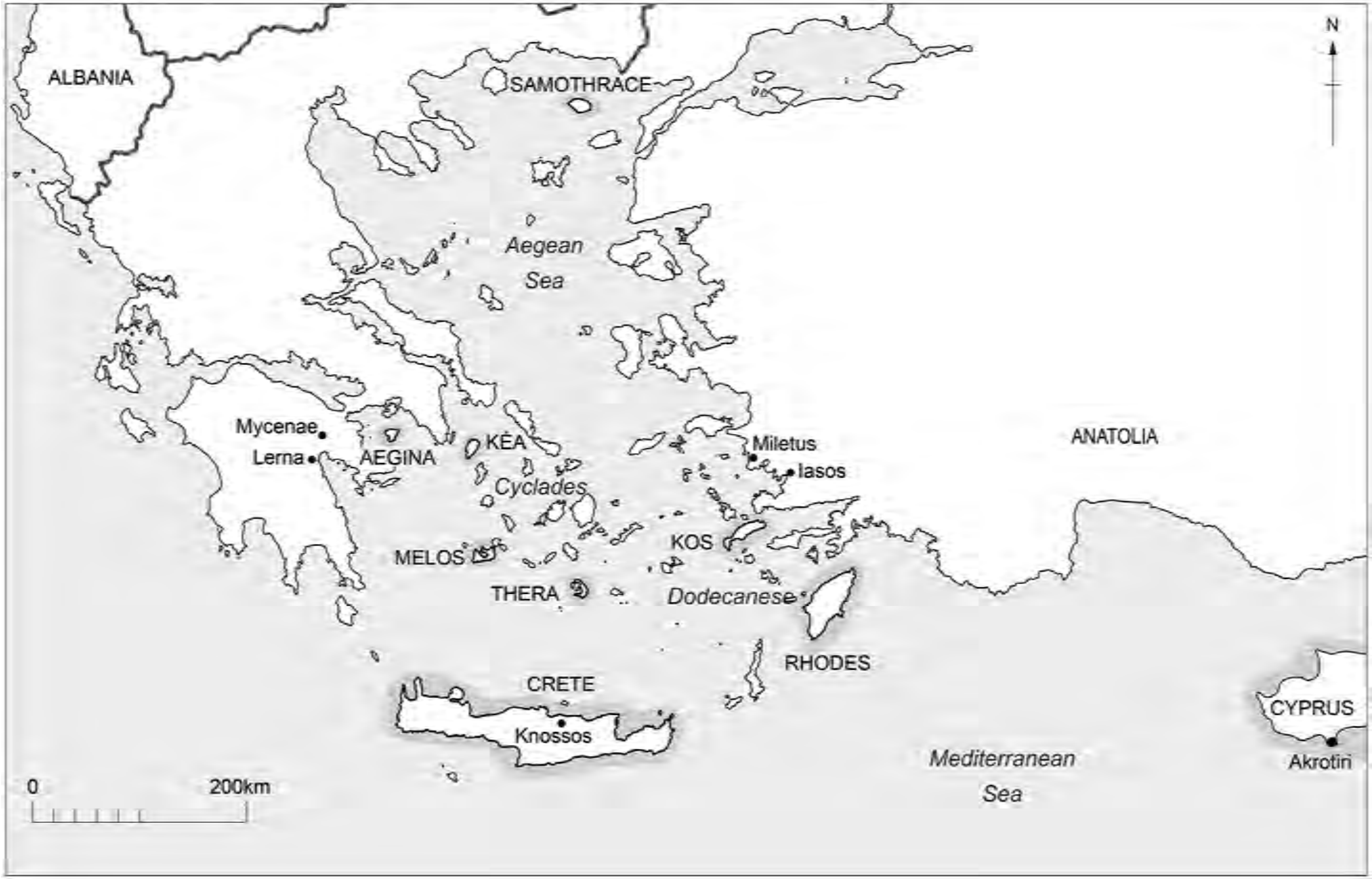

Figure 1.3.1 Map of the Aegean and eastern Mediterranean

(Girella and Pavúk 2016). There also exists some evidence for Cycladic imports on Crete, in small quantities; and some links between the mainland and the Cyclades (Nikolakopoulou 2007), though nothing this early suggesting contact between the east Aegean and the Cyclades. In all cases the quantities are certainly modest, suggesting a low-level, infrequent mode of connectivity. Moreover, one would have to say that the connections are weak, as there is little to no sign of any effects on local traditions. The content of these exchanges seems to be largely economic, as we are dealing with storage amphoras and jars for the most part, though some indications from Aegina and Miletus could indicate closer ties. And in terms of directionality, the evidence suggests that Crete is more active in stimulating these connections. We have to guard against biases in the evidence, with Cretan pottery perhaps being more fully studied and more easily recognized; and we should not overlook the signs of other cross-cutting connections. Nonetheless, this is the period when the Cretan palaces of Knossos, Phaistos and Malia are in competition, and creating demand for bronze objects, with neither copper nor tin available on the island. So one might well imagine that metals are really a driver here, as in the east Mediterranean generally at this time (Broodbank 2013: 376).

Overall, the network ties in this phase are diffuse, and there is no sign of social changes occurring because of them. It is therefore difficult to argue that this phase is one of 'globalization'. On the other hand, the weak ties holding together far-flung clusters of communities gives this the character of a 'small world' network – which would be resilient over the long term (Knappett *et al.* 2011).

Phase 2: Middle to Late Bronze Age, *c.*1750–1450 BCE (MM III–LM I)

Later in the Middle Bronze Age, equivalent to the Cretan phase Middle Minoan IIIA, or *c.*1750 BCE, something changes quite drastically in inter-regional connectivity. Lasting through the first phases of the Late Bronze Age, it corresponds to what I have elsewhere described as a shift from networks of exchange to networks of affiliation (Knappett and Nikolakopoulou 2005). We can now observe that network ties *are* having pronounced social effects. At the site of Akrotiri on the island of Thera, for example, various artefacts and practices better known from Minoan Crete find themselves adopted – from new kinds of architectural features and arrangements of space, to new weaving techniques, to new ways of making pottery on the wheel. Some of the uptake is quite faithful to Cretan prototypes, though there is also a lot of what some scholars might call 'hybridization', though this is a less effective term than others like 'translation'. I use it here since Girella and Pavúk call this the 'hybrid phase' in the northeast Aegean too – where the previously very limited contact now seems much more thoroughgoing, at least at Samothrace, and to some extent also on the islands of Lemnos, Lesbos and Chios. Elsewhere we see much the same picture – on other Cycladic islands (Kea and Melos), in the Dodecanese (Rhodes and Kos) and in coastal Anatolia (e.g. Miletus and Iasos). Although the evidence for connectivity does tend to be largely dominated by Cretan imports, there are now also many more signs of cross-cutting connections, for example between the Cyclades and the east Aegean (with both Koan and Milesian imports on Thera: Knappett and Nikolakopoulou 2008; Knappett and Hilditch 2016). Material does also make its way to Crete from these areas, though largely confined to Knossos presently, where Cycladic and east Aegean imports (from Rhodes, Kos, and Miletus) have been identified (Knappett 2006).

So we can quite confidently say that in this phase the strength of ties is much greater than before, and so presumably was their frequency – with the depth of learning for some of the adopted technologies, like wall plaster, weaving, and the potter's wheel, contacts were surely more intense. As for directionality, there still seems to be a certain dominance of Cretan links, with the quest for metals as strong, if not stronger, than before, though the geopolitical situation on Crete had changed considerably, with Knossos now probably the single major palatial power. That said, there are certainly ample connections that are not Cretan, and although we tend not to imagine that the other areas of the Aegean had much impact on Minoan culture, there is the curious case of figurative wall paintings, which do not occur any earlier on Crete than they do in the Cyclades; and which given the rich pre-existing tradition in the Cyclades, could have originated there. We ought also to take into account the signs of mainland connectivity in LM IB: even when Crete is still supposedly dominant regionally, a number of sites seem to be receiving imports of Marine Style, a quintessential Cretan style, from the Greek mainland. So we should be careful about assuming too much directionality from Crete.

One of our four criteria that we have not yet discussed for this phase is tie *content*. I would argue that we are no longer just seeing economic exchange, but something more textured. We see pronounced mobility of many different kinds of artefacts and techniques, and some look as if they must be tied up with ritual. Miletus especially has a sanctuary area with pronounced Minoan influence, with altar platforms, plaster offering tables, and rhyta (Niemeier 2005; Raymond *et al.* 2016). The Xeste 3 frescoes at Akrotiri show what must surely be a ritual scene arranged around a lustral basin, a typically Minoan architectural feature with probable cult functions (Doumas 1992). We might also bring up the clear Minoan content in the riches of the Shaft Graves at Mycenae (Dickinson 1984). Indeed Joseph Maran has recently commented on the 'wide array of Minoan religious paraphernalia' in the Shaft Graves, and a 'turn towards elements of Minoan religion at the very beginning of the Mycenaean period' (Maran 2011: 289). Could it be that the Minoanization of this phase is in large part a religious phenomenon? That is not to say it was not also economic – as Kowalzig argues for the Mediterranean in the later, Archaic period, religion and maritime economic activity were tightly entangled (Kowalzig in prep). Religion would be one binding force that could stimulate multiple communities across a network to make the necessary investments in inter-regional ties to keep them strong. This then makes for intense interactions forming a dense network – or, in other words, the minimum definition of *globalization*. Minoanization may not span a particularly wide area, mostly confined to the Aegean, but its characteristics in this phase have all the hallmarks of globalization. If we were to explore further, using Sklair's (2006) eight trends, then we would find that many of these also seem to apply quite well – such as standardization and unevenness, for example.

Phase 3: Late Bronze Age, *c.*1450–1200 BCE (LM II–III)

If we take the orthodox position that Minoanization spreads out from a Minoan core, then we have to imagine that Minoanization comes to a very abrupt end with the wave of destructions on Crete in LM IB that bring Minoan civilization to an end. However, the continuity of connectivity across the Aegean suggests that the network was not as centred on Crete as is often believed. We have already mentioned the imports of Marine Style from the Greek mainland occurring earlier, in the LM IB phase. Now we see the Greek mainland, from LM II onwards, really just picking up the same networks. Indeed, archaeologists working at Miletus have recently argued that this first Mycenaeanizing phase (Miletus V, LH IIIA) has much in common with the preceding Minoanizing phase (Raymond *et al.* 2016). It is not until the second Mycenaeanizing phase (Miletus VI, LH IIIB) that the situation changes radically, with much greater evidence for pervasive mainland influence. Indeed, the excavator of Bronze Age Miletus, Wolf-Dietrich Niemeier, believes that it signifies an actual presence of Mycenaean mainlanders, not least because of the Mycenaean burial customs (Niemeier 2005: 16). Mountjoy

(1998), however, sees acculturation rather than immigration, though both authors agree that this 'Lower Interface' area sees a great deal more evidence for Mycenaeanization than do areas of coastal Anatolia further north, the so-called 'Upper Interface' (see also Girella and Pavúk 2016). Returning south, Rhodes and Kos also see a lot of Mycenaean influence, with many Mycenaean-style chamber tombs on Rhodes (Niemeier 2005: 14), and all of the main features of Mycenaean identity present on Kos, with significant evidence for Mycenaean cultic objects and funerary rites (Vitale 2016). In the Cyclades, too, we see major changes in the material culture, with Minoan connections replaced largely by mainland Mycenaean ones. The east and west shrines at Phylakopi on Melos have clear connections with the Argolid, and Earle has used this and other evidence to suggest that cult practices were integral to Mycenaeanization in the Cyclades, much as they were with Minoanization too (Earle 2016).

Indeed, there is an argument to be made that Mycenaeanization has very similar network properties to Minoanization in these same areas of the Aegean where the latter was present – i.e. the Cyclades, the Dodecanese, and the 'Lower Interface' of coastal Anatolia. That is to say, possessing the same levels of tie strength and frequency, and similar content, according to the argument that religion was key to both. Of course, the directionality has changed, from Crete to the Greek mainland, but interestingly the network is robust to this change. But Mycenaeanization has another important feature that we have not yet addressed – its much wider reach. We have to now include parts of northern Greece (Kiriatzi and Andreou 2016); the eastern Mediterranean, notably Cyprus (van Wijngaarden 2002); as well as the central Mediterranean, especially southern Italy, Sicily, and Sardinia (Blake 2008). Mycenaean pottery is found both imported and locally imitated (depending on the period) in quite some quantities. However, we might suggest that these more far-flung connections are different to those we have described above: perhaps less frequent, less strong, with different directionalities (e.g. Crete more tied to the central Mediterranean than was the Argolid – see Kiriatzi and Andreou 2016), and probably different tie content too – arguably more economic than religious. In this respect, these wider network links are perhaps more like those of phase 1 for the Aegean, as described above.

What are we then to make of this 'Mycenaeanization' phase? Certainly, if we are to dub Minoanization an example of an early globalization, then Mycenaeanization, at least in the Aegean area, also qualifies. But should we also extend this to the wider east and central Mediterranean areas? Whereas in the Aegean I think one can certainly describe a dense network of intense interactions in this phase 3, it is debatable whether that description applies to the wider region. The wider space has more the character, arguably, of a 'small world', bound together by the strength of weak ties – and an economic rather than a religious phenomenon.

Conclusions

This brief look at the before, during and after of Minoanization, by comparing the frequency, strength, content and directionality of connectivities, shows both how useful globalization can be as an organizing principle, and how underdeveloped some of our thinking is about connectivities. Even just taking some parameters of networks is a useful start, without even venturing into more formal network analysis. One especially interesting question has surfaced through this exercise – what would motivate multiple communities to all invest in connections, thereby distributing the otherwise prohibitive costs of long-distance strong ties? With the material discussed here, it seems one of the most convincing answers is 'religion'. Even though it is conceivable that in the case of Minoanization this religion is promoted from a centre (Knossos), its acceptance by other communities (if only in part) would suggest that it brought considerable benefit. Furthermore, we might note that if Minoan religion was polytheistic (see Gulizio and

Nakassis 2014), then it could have been adopted accretively rather than in an exclusionary fashion. If we think briefly about what happens later, it is only in the aftermath of the disintegration of the Bronze Age political systems that the entire Mediterranean basin becomes quite tightly connected for the first time, in a process of Mediterraneanization (Morris 2005). Broodbank (2013) has this happening as early as the tenth/ninth centuries, whereas Malkin pins it as an Archaic phenomenon. Either way, if we could assess it in terms of the parameters outlined above, we would get further towards interpreting it comparatively. This would be an interesting exercise, as Malkin calls it a 'small world', which by strict definitions should be composed of weak rather than strong ties over distance, whereas we have seen that a basic definition of globalization requires strong connections forming dense networks. Given the latter requirement, then it would indeed be interesting if it were religion that again helped to distribute the network cost of having long-distance strong ties, as inferred by Kowalzig for the Archaic period (Kowalzig in prep).

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1.4

Economic aspects of globalization in the past material world

Gary M. Feinman

Introduction

Questions and deliberations concerning globalization are more than a hot topic of extended cross-disciplinary focus in academia; they also are central to long-simmering debates regarding policies and their implications that today often enter the public arena. For example, a quick perusal of broadly accessible media outlets from late 2013 and early 2014 reflects a suite of still unresolved but vibrant civic ponderings: 'When did globalization start?' (*The Economist* 2013), 'The dark side of globalization: why Seattle's 1999 protesters were right' (Smith 2014), and 'Have we reached the end of globalization?' (CNN 2014). Yet can such issues really be evaluated judiciously without defining the critical elements of globalization, and then dissecting and assessing its historical scope? Given the broad temporal and spatial elements implied by the concept 'globalization', is it not most likely that the outcomes and effects of this multifaceted process would be highly variable across time and space? But through a diachronic and comparative examination of human connections over time, might we see some commonalities and learn relevant lessons?

This chapter aims to provide a multidisciplinary basis that contextualizes contemporary globalization by situating these modern processes in a deeper temporal context. The objective is not so much a broad-brush review of planetary history (McNeil 2008) but a discussion of the various ways that archaeologists, anthropologists, historians, and associated scholars have conceptualized macroscale networks and relations, and why an appreciation of this longer-term history can help us understand, evaluate, and provide comparative perspectives on these more contemporary developments. The remainder of this chapter proceeds first to define globalization in a manner that does not arbitrarily segregate the present from the past. Underpinned by its definition, the importance of the historical vantage on globalization becomes clear, and scholarly frames and debates concerning macroscale relations and processes are reviewed. The final section outlines questions, directions, and variables that could in part frame an explicitly cross-disciplinary agenda for unravelling the roots of globalization in the past material world and provide a firmer context in which to probe, measure, and assess the significance of recent changes in large-scale events and processes and their synergies with local and regional practices.

Globalization: definition and conceptual implications

Globalization is a challenging concept to define, one that can be fashioned in a multitude of ways (Al-Rodhan and Stoudmann 2006). At its essence, it is the broadening, strengthening, and intensifying of global interconnectedness, a meaning that requires immediate refinement and elaboration (Faulconbridge and Beaverstock 2009: 331). Any specific perspective on globalization clearly refers to a process or, more precisely, a set of linked processes. The concept also involves, by definition, a clear engagement with (and sensitivity to) the temporal and the spatial, more precisely the ramifications and implications of compression in the relationship between time and space (Kearney 1995).

For the sake of clarity and explicitness, I adopt Al-Rodhan and Stoudmann's (2006: 5) broad definition of globalization as 'a process that encompasses the causes, course, and consequences of transnational and transcultural integration of human and non-human activities'. Yet also essential is Kearney's (1995: 548) recognition that 'globalization refers to . . . processes that take place within nations but also transcend them, such that attention limited to local processes, identities, and units of analysis yields incomplete understanding of the local'. These perspectives underpin an analytical frame that has important implications for how globalization is conceived and researched; they also define challenges for the study of deep history (through archaeology and associated fields) while drawing a connection between them (see also Chase-Dunn 2000; Hall *et al.* 2011).

For those whose prime focus is truly restricted to relatively recent networks and connections that span the entire globe, there are rapidly expanding volumes of evidence that the roots of the component links (as well as the modes and mechanisms of connection) extend deep into the past. Such historical links and complexities have contributed to the total absence of consensus regarding when and how the present pan-planetary network became systemically connected (e.g. Wallerstein 1974; Pomeranz 2000; Goldstone 2002; O'Rourke and Williamson 2002). Although there is no question that new transport and communication technologies have greatly compressed the relationship between space and time in recent decades (Wallerstein 2000), our understanding of contemporary globalization cannot be enhanced by arbitrarily walling it off from the past (e.g. Sherratt 1995: 5; Sluyter 2010). Globalization is not a process that has a clearly delineated beginning and end (Al-Rodhan and Stoudmann 2006: 3). Even today, there are peoples around the world who are barely or weakly tied in to global networks. We wonder how does this process begin, spread, intensify, end, and/or how is it resisted? And yet, history is awash with just such processes and their diverse, but still informative, outcomes (e.g. Carlson 2012).

The focus on such historical questions and debates opens key cross-disciplinary agendas that require vantages into the deeper past that only can be provided by historians, archaeologists, and other scholars who investigate these temporally distant realms. Yet at the same time, a concern with globalization (broadly defined) entails that researchers in the social and historical sciences engage with scale and spatial variation, concepts that too often have not been deftly handled by prior paradigmatic frames in these fields (e.g. Fletcher 1995; Blanton and Peregrine 1997; Bodley 2003).

From this perspective, and in accord with Immanuel Wallerstein (1974, 1976: 346) and many of those who have built upon his seminal works, global or world systems need not be strictly planetary or inclusive of the whole Earth. A limited focus on narrow time domains cannot answer questions concerning the roots of globalization or offer sufficient comparative context regarding how contemporary globalization differs from earlier macroscale networks. To provide such context, it is important to acknowledge that globalized 'worlds' may encompass spatial domains smaller than the entire planet (e.g. Hodos 2010; Jennings 2011: 2–3). They are 'inter-societal networks in which the interactions (e.g. trade, warfare, intermarriage, and flows of information) are important for the reproduction of the internal structures of the composite units and importantly affect changes which occur in these local structures' (Hall and Chase-Dunn 1996: 12–13; see also Chase-Dunn and Hall 1993: 854–56). To set an agenda that endeavours to examine and compare these macroscalar worlds, we must first look back conceptually in order to chart ways to move forward.

Archaeological approaches to scale

Historically, a keen sensitivity to scale has not been an integral aspect of archaeological practice. During the early academic history of the discipline, culture history approaches dominated theoretically, regional-scale field procedures were mostly geared to find suitable sites to excavate, and concepts like the 'type site' held sway. In regard to spatial scale, archaeologists often excavated small sections of large sites and then extrapolated not merely to the site as a whole but frequently to characterizations of the entire culture or society (e.g. Haury 1982). Given the limited state of knowledge regarding the deep past in most regions at that time, perhaps there were few alternative ways for archaeological interpretation to proceed. Although the importance of broader-scale contacts through migration and diffusion were recognized (often depicted as arrows penetrating the orbs that represented cultural traditions), these modes of conveyance rarely were firmly underpinned by evidence, deeply dissected, or analysed in behavioural terms. The notion of self-contained, isolated communities retained appeal (Lesser 1961).

The advent and broadening application of settlement pattern approaches in archaeology during the mid-twentieth century (Parsons 1972; Kowalewski 2008) ushered in more regional-scale awareness in the discipline, which at mid-century coincided with the growing influence of developmentalist thought across the social sciences (Wallerstein 1976). The latter frame provided the foundation for early processual archaeology, with its focus on societies and regions (and their components) as the primary units of investigation and analysis (e.g. Binford 1965). This mid-century theoretical shift brought much more in-depth consideration to regional and intra-societal variation in the past, so that it became interpretively less valid to extrapolate blithely from a small sector of a single site or a handful of artefacts to an entire culture, region, or society. Yet at the same time, macroscale processes and phenomena generally were diminished in interpretive importance as societies and regions were envisioned as tightly bounded, and change was presumed to have had almost entirely local triggers (e.g. Sanderson 1991: 187; Webster 1994: 419). The assumption that societal change results principally from endogenous factors was shared broadly by theoretical frames as diverse as cultural ecology, neofunctionalism, and cultural materialism, among others.

By the last decades of the twentieth century, the increasing prominence of regional archaeological settlement pattern surveys in many regions (e.g. the Mediterranean: Renfrew 2003; the Americas and beyond: Sabloff and Ashmore 2001) in conjunction with the greater attention given to macroscale history (e.g. Braudel 1972; Wallerstein 1974; Wolf 1982) broadened the attention and awareness to supraregional processes in archaeological analysis and interpretation (e.g. Peregrine and Feinman 1996; Kardulias 1999; Kowalewski 2004; Balkansky 2006). For the most part, these efforts are explicitly multiscalar in focus, and so they do not privilege the 'macro' at the expense of the 'nano'. They do, however, endeavour to probe and understand the interplays and relations between the different levels of human interactivity from the domestic to the macroregional.

Many of the first explicit attempts to grapple systematically with macroscalar phenomena in the deep past aimed to broaden the narrow confines of Wallerstein's (1974) proposed frame, which he outlined to probe the emergence of European capitalism. Modifications were proposed concerning the initial presumption that precious goods did not have systemic significance, the rigid notion that macroscale networks must have definable cores and peripheries, the assumption that broad-scale processes do not have significant impacts in worlds composed of smaller-scale polities, and the Eurocentric focus and timing of the original analysis (e.g. Schneider 1977; Kohl 1978; Blanton and Feinman 1984; Abu-Lughod 1989; Chase-Dunn and Hall 1993).

The subsequent debates and expansions of Wallerstein's seminal conceptual frame not only established a basis for comparative perspectives on macroscale relations, but provoked fruitful challenges to long-standing suppositions that all ancient or 'primitive' economies were qualitatively different from modern ones (e.g. Smith 2004; Feinman and Garraty 2010). Just as these once-fashionable categorical divisions are eroding with the accumulation of evidence, so too are the notions that draw artificial thresholds between the ever-narrowing sections of present and what came before (Blanton and Fargher 2008). While changes and differences over time are evident, and specific questions may always be examined from narrow temporal foci, broad issues concerning changes in human networks and socioeconomic connectivity are most effectively and comparatively addressed and contextualized from broad historical frames (Chase-Dunn and Hall 1997).

An explicit multiscalar vantage also provides prospective avenues to address the so-called 'micro–macro problem' (e.g. Schelling 1978; Hedström and Swedberg 1996), which to date remains largely unresolved in the context of archaeological theorizing that often experiences swings and debates between unfettered description and narrative at one pole and efforts to explain only commonalities (in lieu of diversity and variation) at the other. The ways out of this long-standing predicament require explicitly multiscalar approaches that probe and account for human agency at smaller scales and then integrate and project those considerations into the empirical analysis at broader scales. At a more case-specific level, recent multiscalar approaches to broad time–space analyses, freed from the presumed structures and conceptual rigidities of earlier frames, have made major contributions to our understanding of key episodes of historical variation and change (e.g. pre-Hispanic US Southwest: Mills *et al.* 2013; prehistoric Aegean: Parkinson and Galaty 2009; Postclassic Mesoamerica: Smith and Berdan 2003).

The empirical case for a globalizing perspective on the past

There is no consensus concerning the chronological domain appropriate for the examination of globalization (Robinson 2007). For some investigators, reasonable time-depth is no more than decades, coincident with perceived rapid recent advances in the technology of money transfer and communication (e.g. Sklair 1999). Other scholarly constituencies traditionally draw the threshold to around AD 1450–1500, timed with the shift in planetary wealth and power toward the West (e.g. Wallerstein 1974). A third suite of scholars with a greater appreciation of historical processes expands their analytical vantages by millennia, back to the advent of urbanization and early states (e.g. Frank and Gills 1992). For them, significant macroscale processes need be associated with the emergence of hierarchies and inequalities. All of these investigators share a view of non-urban societies as spatially localized, relatively static, and tightly bounded, with few significant linkages that extend beyond those limits. Whether in specific reference to Wallerstein's (1984) 'minisystems' or the bounded cultural units at the focus of cultural historical and traditional neoevolutionary approaches in anthropology, it is frequently further assumed that the societal limits of these entities were culturally, economically, and politically coterminous.

A fourth perspective adopts even longer-term temporal vantage (e.g. Chase-Dunn and Hall 1993, 1997; Chase-Dunn and Grimes 1995; Galaty 2011; Hall *et al.* 2011), recognizing that the boundaries of human groupings were often more fluid and contested than often presumed (Wolf 1982; Lightfoot and Martinez 1995; Terrell *et al.* 1997; Burch 2005; Smith 2005, 2007), and that significant macroscale connections need not necessarily imply either hierarchical differentiation or economic inequality manifest through strict spatial demarcations between cores and peripheries (Chase-Dunn and Hall 1993, 1997; Galaty 2011: 10–11). In fact, key units in macroscale networks, past and present, may be smaller and less spatially delimited than nations or physiographic regions (Leach 1954; Bergesen and Lizardo 2004; Burch 2005). Empirically, the notion of small-scale, closed, human networks also is challenged by recent genetic and linguistic findings, which illustrate that significant interaction and regular movement across continental scales is fundamental to the human career (Tishkoff and Kidd 2004; Pagel *et al.* 2013). Contemporary expressions of human diversity rely much more heavily on descriptors, such as 'clines' and 'networks', rather than 'races', 'isolates', and 'impermeable barriers'.

Long-distance trade connections that crossed cultural boundaries are well documented back to the Upper Paleolithic (Bar-Yosef 2002), with potential effects on human survival, well-being, and the mitigation of risks. Over human history a diverse range of non-local materials, beyond bulk items and staple goods, have been critical for the reproduction of social and power relations (e.g. Schneider 1977; Smith and Berdan 2003) in many different contexts. Ebbs and flows in long-distance economic networks have critically and repeatedly underpinned the emergence, resilience, and collapse of extant power structures as well as urban and market networks (e.g. Curtain 1984; Chadhuri 1985; Abu-Lughod 1989; Smith and Berdan 2003). The transformative impact of trade and exchange on sociopolitical relations, economic actions, and individual values and needs may be intense, and across history, participation in interregional networks has promoted major technological and structural transitions in society (Adams 1974: 244).

Even in preindustrial contexts, the suite of widely exchanged exotic goods was not restricted to rare preciosities that were narrowly confined to those of the highest status. In certain settings, bulk luxury goods (salt, cotton cloth, obsidian, and cacao in Mesoamerica: Blanton and Fargher 2012; salt in Mesoamerica: Kepecs 2003: 130) often were broadly distributed across status lines, even though costly. Such valued exotics, traded in quantity frequently, have served key roles in household reproduction, through rites including, but not limited to, feasts, weddings, and mortuary rituals (e.g. sugar in the European Industrial period: Mintz 1985; basic ornaments, certain pottery vessels, marine shells in Early Historic India: Smith 1999).

Although careers of research remain to be done to document to what degree and how broad-scale processes are refracted through local and regional structures and institutions in different global contexts, the increasing observations of cross-cultural synchronicities in the rises and falls of polities over space are a significant step. Such macroscale cycling has been noted in networks of middle-scale societies in the prehistoric US (Anderson 1994; Neitzel 1999) as well as for polities and networks at grander scales (East and West Asia: Chase-Dunn *et al.* 2000; Bronze Age Europe: Kristiansen 1998; ancient Mediterranean: Sherratt 1993; Postclassic Mesoamerica: Smith and Berdan 2003; Afroeurasia: Turchin and Hall 2003; Roman to Early Modern Europe: Turchin and Nefedov 2009). Of course, the specific regional and local consequences of these synchronous oscillations are expectedly neither uniform nor simple (e.g. Kowalewski 2000; Parkinson and Galaty 2007) and certainly can result in cultural divergences and/or the diffusion or transference of ideas and innovations (Hodos 2010). In different contexts, inter-societal interaction can result in both 'spread effects', the transference of information and wealth, as well as 'backwash effects', which leads to increasing differentiation and the precipitation of further underdevelopment (Myrdal 1971; Chase-Dunn and Hall 1997: 38–39). Furthermore, the flows of people, material, and information need not be unidirectional (Stein 2002). In all instances, documentation of spatial coincidences is only one key step, and the causal connections must be affirmed.

From a wide range of empirical and conceptual perspectives, it has become evident that human connectivity across broad spatial domains has a deep history and that these links seem often to have systemic properties, in the sense that their local and regional consequences can be significant, and that local and regional processes can ramify (in various ways) across broader scales (Hall *et al.* 2011: 264–65). Furthermore, while the modes, logistics, and intensities of these broad-scale linkages were unquestionably highly variable over time and space, it has repeatedly proven unsuccessful to draw hard-and-fast thresholds qualitatively demarcating precise dates when new logics and interconnections emerged. Even long-held notions regarding widespread price convergences and other economic properties in comparatively recent European market systems have been shown to extend deeper into the past with more time–space parallels than previously assumed (Keller and Shiue 2007; Rönnbäck 2009; Bateman 2011). Stark dichotomies drawn in regard to markets, economic behaviours, and more between current Western peoples and all others, which have framed academic debates for centuries, no longer rest on solid empirical ground (e.g. Lie 1997; McCloskey 1997; Goody 2006; Feinman and Garraty 2010). A slew of potential insights regarding the history of globalization are still to be gained from analytical frames that realize chronological depth, comparative contexts, and interdisciplinary dialogues.

Agendas to assess shifting human networks and globalization over time

Although the foundations of a systematic, and behaviourally focused, macroscalar framework were introduced to archaeological practice through Wallerstein's conceptual scheme, a generation of scholarship has greatly expanded the approach and hence widened its applicability (e.g. Chase-Dunn and Hall 1997). The historical investigation of globalizing processes must be explicitly multiscalar, interweaving streams of change through the actions of different agents residing at dispersed locales. Furthermore, contemporary approaches should be less rigid regarding the nature of participating entities and agents, while accepting that meaningful transfers can include much more than staple goods and occur through diverse modes of intercultural transaction. In part, these theoretical expansions require the integration of more bottom-up conceptualization with the predominant top-down vantages adopted by most explicit world-systems approaches (Kowalewski 1996: 33).

Just as earlier archaeological initiatives to theorize at macro- and multiple scales were sustained and fostered by new methods and procedures, including systematic archaeological settlement pattern fieldwork, computerized technologies to handle big data, and new field mapping technologies (such as global positioning devices and laser transits), future investigations of globalization can build productively on new sourcing technologies that hold the potential to characterize quantitatively the long-distance movements of materials (Golitko *et al.* 2012), as well as theoretical advances in the analysis of social networks (Mills *et al.* 2013) and new aerial technologies that bring new macroscale vantages to environmental contexts that are less open to pedestrian coverage (Chase *et al.* 2012). Archaeologists must continue to expand their diachronic settlement pattern analyses into ancient margins and frontiers (e.g. highland Oaxaca: Feinman and Nicholas 1999; Albania: Schon and Galaty 2006), while adapting these regional-scale procedures to areas not previously investigated (e.g. preindustrial Cambodia: Evans *et al.* 2007; Qin Dynasty, China: Feinman *et al.* 2010). Collectively, such efforts expand the corpus of potentially comparative settings as well as the tools and evidential pieces to employ in historical explorations of human connectivities, yet, at the same time, the broadening and refinement of the intellectual enterprise also is in order.

Geographers long have compared the use of formal and nodal approaches to define spatial units (Haggett 1966: 241–53). The former are defined by similarities or homogeneity in certain specified characteristics, while the latter reflect patterns of interaction. Based on conceptual as well as empirical grounds, archaeologists are now in a position to elevate consideration of the latter through the examination of actual flows of material and even people (e.g. Tiwanaku: Knudson *et al.* 2004; Spanish Florida: Stojanowski 2005). The formal/nodal distinction has never been an either/or proposition; juxtaposing these perspectives, however, not only provides a bottom-up vantage but lends itself to multiscalar analyses in which individual participation in nested groupings from households to residential clusters, neighbourhoods, and communities (all less encompassing than nations or societies) can be assessed quantitatively. Furthermore, the ability to measure actual flows and patterns of interaction permits the decoupling of future archaeological analyses from a tenet, long held since the days that culture area thought predominated (Wissler 1927), that the homogeneity of cultural characteristics adequately defines meaningful societal units.

The ability to chart network links and flows permits the examination of boundary variables (Blanton *et al.* 1993: 18; Blanton and Peregrine 1997: 6) that are critical to multiscalar historical investigation, but rarely are ascertained empirically. Archaeologists are gaining the capacities to assess how and where the flows of material goods fall off, and how these volumes and patterns of flow shift across time (Brughmans 2013). Such examinations are crucial not only for defining the nature of units in macroscale networks, but also for evaluating the relative permeability at the margins of such aggregates. The relative openness and stability of political boundaries has been linked to the scale and complexity of polities (Oaxaca: Kowalewski *et al.* 1983) and the nature of the interactions between rival competitors (Aztec empire: Berdan 2003), but the control of flows across boundaries also can be a critical element that affects how power is funded and how political affiliations are organized (e.g. Levi 1988; Blanton and Fargher 2008: 254).

At the same time, the disentanglement of macroscale analysis from presuppositions regarding the existence and placement of cores, peripheries, and frontiers does not nullify that the processes of globalization generally are, and frequently have been, interwoven with inequalities of wealth, disparities in accumulation, imbalances of power, disparate demographic densities, and assessments of how these elements of macroscalar networks shift over time (Kentor 2001). Rather than through assumption, these dimensions can now, at least for some regions, be measured, allowing shifting patterns of connectivity to be defined empirically. To look forward, such analyses can and should be employed to supplement ongoing smaller-scale studies that focus down on the outcomes of globalization, phenomena such as diaspora, inter-ethnic interaction, and transnationalism, to provide greater spatial context as well as comparative depth (e.g. networks: Collar 2013; world-systems analysis: Galaty 2011; trade systems: Oka and Kusimba 2008).

Pulsations in macroscale flows frequently have important local impacts, but such oscillations are not entirely unique to contemporary timescales (Chase-Dunn and Jorgenson 2003: 8). Just as the careful investigation of globalization demands consideration of multiple analytical scales, so too will it profit from wider and flexible temporal vantages. When examined from different chronological foci, some trends that at first appear linear, even inevitable, may reveal less regular patterns of change (e.g. Feinman 1998: 97–104).

Reframing globalization: a multiscalar, deep time, and networked approach

As noted at the start, the intellectual bounds of globalization research are defined in a multitude of ways. Many prefer only a narrow and purely planetary scope, with only opportunities for relatively brief (at least for an archaeologist) cross-temporal comparisons. Others focus mainly at local scales, charting the effects of perceived external forces. In this chapter, I have advocated for a multiscalar and deep time perspective on the long history of human connections and how those connections have synergistically reverberated at household, local, and regional scales. Furthermore, I have suggested that after a generation of scholarship, it is past time to look beyond Wallerstein's (1974, 1980) initial world-systems constructs and to recognize that the current toolbox of world-systems approaches, freed of many of the initial conceptual rigidities, has much to offer the investigation of the history of global connectivities. At the same time, sharpened techniques, especially network analyses and an array of technologies that allow flows to be measured, along with new streams of research that directly probe the complex relations between interaction and identity, provide new ways to amplify that paradigmatic toolkit and the questions that we endeavour to probe with it.

Such an agenda is undoubtedly ambitious. To tackle it requires not only the breaching of long-held barriers and building communication bridges between an array of academic disciplines, but also the crashing of generally more impermeable intellectual divides that have been impediments to holistic considerations of the present with the past, the recent West from the global rest, and so-called primitive versus modern economic systems. It requires the interweaving of institutions and structures with a consideration of agents (both subaltern and elite), and the examination of the material from alternative lenses of economic practice, power, and identity. Although the intellectual path that I prefer is clearly steep, the principal alternatives doom us to approaches that isolate the analysis of the contemporary era (from the rest of history) because of its presumed uniqueness. Yet, as McNeil (2008: 9) has recognized:

> All ages are unique; each moment and every person is unique. So is each atom and sub-atomic particle for that matter. But continuities and commonalities also prevail, and recognizing them is what historians and scientists focus on when trying to understand the ever-changing world.

When addressing the broad public concerns as well as serious academic queries regarding recent globalization, its historical roots, and web of effects, will we not ultimately build a much stronger foundation if we adopt perspectives grounded in rich contexts, deep histories, and broad comparisons rather than paeans to the perceived exceptionality of our times?

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1.5

Globalization thinking and the past

Robbie Robertson

Introduction

Because so much of how we read the past is conditioned by ideas and descriptions that grew out of that past, globalization thinking potentially provides us with fresh opportunities to re-examine history through new lenses and discover detail and trends previously obscured. However, globalization has itself succumbed to similar tendencies. Indeed, part of the difficulty in understanding globalization lies in the way the term has been captured by vested interests (for example free marketers and anti-capitalists) with their own take on globalization as a form of economic practice that promises or threatens world integration. Additionally, the term is used as shorthand for defining features of contemporary society, such as the speeding up of spatial and temporal processes of change, the onset of cultural homogenization, interdependency, or the withering of the nation-state. Notions of archaic, proto and modern globalization are also confusing, with the former being both precursors of modernity and indicators of globalization's universality. Together, they suggest continuity. Yet for others, ownership is something that can neither be traced back in time nor shared. Globalization is simply Westernization and it brought to the world the shock of modernity (see Latouche 1996; Bauman 1998; Scholte 2005; Hopkins 2002).

There are elements of truth in all these understandings, but by themselves they do little to explain globalization or contextualize it, especially within the contours of social development, which is usually the elephant in the room whenever globalization is discussed. Let us begin with a very simple definition: globalization is a form of connectivity. The form, of course, is very important. We are not talking about just any type of connectivity but connectivity that envelops the world. The distinction is important. The Romans were particularly adept at drawing diverse peoples into their Mediterranean-based empire, yet their domain remained a mostly disconnected microcosm or set of microcosms of a much larger entity. It never had the potential to envelop the global world, despite pursuing strategies similar to many later used by states and organizations to globalize their own activities, and despite sharing features associated with expanding networks and growing interconnectivity.

It is in those similarities where confusion often lies. Many writers acknowledge that the notion of globalization as integration is a chimera, that complex connectivity resources anchored localities with new freedoms, experiences and networks, although not equally or simultaneously

(Ghemawat 2011: 16; Tomlinson 1999: 97, 276). The result is not homogeneity but diverse complex and reflexive interactions. Thus it was in the past also. As Bryan Miller and Ursula Brosseder's contribution in this volume on the Xiongnu acknowledges, growing connectivity with China did not so much expand the Chinese world as feed changes that were driven and maintained locally by the Xiongnu. Parallels exist also during the more recent period of imperialism. Local Pacific island elites often encouraged Britain's imperial expansion as a way of gaining access to new resources to maintain dominance within their own societies and over neighbours or rivals. Local agency should never be forgotten. Connectivity had similar diverse impacts on past Mediterranean, West, South, East and Southeast Asian societies; it is one reason why historian Ian Morris's social development cores continually shift over time (Morris 2010: 31). In this sense, the globalization framework has great value for historians and archaeologists as a way of moving beyond the superficialities of imagined homogeneous and hegemonic cultures and civilizations. Globalization as connectivity always presents us with diverse complex and reflexive interactions, even when applied to past subglobal contexts that lack the technological drivers common today.

Keeping the definition of globalization simple has an immediate advantage; it enables us to humanize the process. Globalization is a consequence of human actions, in particular of survival and wellbeing strategies (Sanderson 1995: 11–13). Before looking at those strategies, it is worth exploring briefly the social contexts in which they played out. Humans live within groups and cooperate for mutual advantage. More complex, populous societies increase opportunities for cooperation between individuals (Wright 2000: 1, 264); they broaden circles of cooperation (Ghemawat 2011: xi). While this undoubtedly creates its own dilemmas, especially when cooperation extends beyond people we are familiar with, it also creates empowering opportunities for new specializations and imitating activities that are seen as bestowing status and wellbeing on individuals or groups (Ridley 1996: 37–50). Such change is never achieved easily and, without the necessary resources, might never occur at all. Connectivity, then, is the price humans pay to access resources that satisfy their desire for status and wellbeing (see also Snooks 1997: 125–29). Its consequences are always unpredictable. Hence Felipe Fernández-Armesto's description of history as random mutations with enduring impacts (such as evolution: Fernández-Armesto 2009: 312).

In Pankaj Ghemawat's World 0.0 of hunter-gatherers, resource access was severely limited. Without technology or institutional frameworks, connectivity could rarely be sustained over substantial distances or at least generate the transformative characteristics associated with globalization. This limitation diminished with the emergence of an agricultural World 1.0 that made possible population increases and urbanization. It gradually transformed human lives (Ghemawat 2011: 5–9). Morris describes this as an outcome of caging, forcing people to organize and innovate to survive, and to incorporate rather than destroy erstwhile enemies (Morris 2014: 78–80). By becoming part of something bigger, societies grew in sophistication. They learned from each other to reduce their own fragility. They specialized to raise productivity. They developed new military technologies to better enable survival and prosperity. And, despite the risks, increasingly they traded with neighbours to obtain what they could not produce themselves. All this, as *The Economist* recently noted, 'starts to sound rather like "globalisation", even if it [is] more limited in geographical area than what most people think of the term today' (*The Economist* 2013). But like hunters and gatherers, agriculturalists possessed no innate global consciousness. People still lived very local, parochial lives and feared the outsider, usually for good reason. Success not only attracted imitators but also conquerors and raiders keen on loot to reward their followers and sustain their own ways of life. Across the steppes of Eurasia no shortage of such candidates existed.

Consequently, how people handled connectivity and managed relations with other communities mattered more than ever, since the stakes were always increasingly higher. Furthermore, in progressively stratified societies, leadership also assumed a qualitative importance that often outweighed the capacity of societies to provide it. Climate change, agriculture and population growth transformed human landscapes, sometimes with disastrous consequences. Desiccation begat warlords who used military campaigns to plunder and create vast tribute empires that for centuries became Eurasia's default political organization (Darwin 2008: 491; Griffith 2001; Morris 2010), spawning new forms of connectivity and insecurity. Connectivity, then, has always been a feature of human communities and a central motor for change, not always for the better. Only during the late fifteenth and sixteenth centuries did connectivity begin to assume global proportions and envelop the world. However, this did not change the imperial and exclusionary character of much subsequent connectivity, despite the growing ascendancy of commerce and technology as growth engines; nor its unsustainability. Any connectivity process that increases human interactions ultimately makes the wellbeing of one community dependent on the wellbeing of others. Exclusion denies that opportunity. It shrinks the markets required to stimulate innovation, and disempowers the people who would constitute those markets. In short, it brings forward the culminating point of success.

If the path to globalization has been far from singular, then its consequences have also been similarly varied. Free trade as a principle for global connectivity might seem a natural outcome, yet it has enjoyed limited acceptance, in part because its short-term consequences constantly trump its long-term promises. Today, smaller countries and technological leaders benefit most from free trade, while larger, less-trade-dependent countries employ protectionist strategies to minimize its impact (Bernstein 2009: 375). Globalization has not removed that dynamic. Nor has it undermined the principal logic behind trade that it thrives on difference. To assert, as some writers do, that 'globalization is nothing more nor less than the intercontinental convergence of commodity and factor prices' (de Vries 2010: 714) is to define globalization solely by one outcome. Integration as a definition of globalization produces similar difficulties.

Globalization describes the ultimately world-encompassing outcomes of human connectivity that on smaller local and regional scales has epitomized human societies for millennia. Ever since humans globalized themselves during the last 100,000 years, opportunities to directly or indirectly reconnect and exchange plants, animals, minerals, writing, ideas, and manufactures have steadily increased with growing technological and governance capacities, urbanization, education, and, especially, wealth. Such opportunities have been affected by the strategies employed for human survival and wellbeing, namely migration, conquest, commerce, and technology. In each strategy, or mix of strategies, mimicry is often the basis for human decision-making. We copy what we believe will bring material success, and we employ the mix of strategies available to us to achieve that goal (Snooks 1997: 45). But only the technological strategy has – to date – enabled societies to generate linear economic growth, not just the short-term windfall profits that were usually the motivation for conquest and commercial strategies. Since this technological difference has become apparent only in the last 200 years, many regard globalization as a contemporary affair. This also is a misreading of history. Technological change grew out of globalization, in particular the social changes it wrought and, as Yuval Harari argues, the ignorance of the world it made manifest (Harari 2014: 249–52). The outcomes these changes generated have never been even in application, nor inevitable, let alone just. Connectivity produces constantly changing gradients of winners and losers; globalization does not change that consequence. Both have always been deeply subversive of the status quo and vested interests, in part because commerce and technology-driven strategies require a wider ownership of resources for success. This has never been achieved easily.

For much of human history the impact of connectivity remained overwhelmingly local or, at most, regional. It is from those expanding regional connections that we derive our contemporary misunderstanding of societies as culturally defined, hermetically sealed, homogenous civilizations (Cannadine 2014: 246). We acknowledge expanding Afro-Eurasian civilizations centred on the Tigris and Euphrates, Nile, Indus, and Yangzi and Huang He rivers, even though none – with the exception of the more distant Chinese – were disconnected from each other in their early manifestations. Too often, though, connectivity is regarded as heralding civilizational identities and conflict (Cannadine 2014: 250). Indeed, Morris sees regional expansion and connections as producing a similar outcome to globalization: 'Mediterraneanization drove up Roman social development', just as Sinicization drove East Asian development and premodern globalization drove Western social development (Morris 2013: 252). As noted earlier, we should be wary of viewing interconnectivity as the harbinger of monolithic cultural groupings. Rather, we should acknowledge that engagement produced many features familiar to globalization today: lost diversity, new forms of difference, environmental degradation, expanding political, economic and social units, and, especially, the gradual development of synergies with ever wider impacts (Robertson 2003: 7). Hence the resulting domains are instantly recognizable in terms of their multiple networks and institutional feel. Take, for example, commercial Classical Athens and other Mediterranean and West Asian cities (Keane 2009: 101–28), where decentralized authority produced features we recognize within our own democracies because they derive from strategic similarity. Or fifteenth-century English: an Indo-European language, developed from the patois of Germanic immigrants, fused with Latin and French, using Phoenician letters and Indian numbers, and printed in books produced by moveable type invented in China. It is both a salutary reminder that no human group ever creates by itself more than a small part of its heritage (Holton 1998: 27–28) and that globalization always involves diverse complex and reflexive interactions, not homogeneity.

Thus archaeologists like Tamar Hodos and Justin Jennings (this volume) claim that such similarities justify the use of the term globalization to describe past processes of interconnectivity and their consequences. This in itself is unproblematic as long as differences between regional or interregional connectivity and global connectivity are acknowledged. In most instances, early communities had neither the capacity nor the knowledge to go far beyond their immediate zones of interaction. Yet these direct and indirect engagement zones did increase, although not progressively. It would take until the end of the fifteenth century CE before the Americas began to be humanly connected with Afro-Eurasia, both the home and migration site for the bulk of humanity, and the impact of global connectivity began to be felt on a scale hitherto unimaginable. Certainly, there were many earlier examples of long-distance exchanges with regard to foods, goods, scholarship, religion and disease, but until the sixteenth century their impact tended to be more regional or transregional than global and – with the exception of microbial transfer – bore few of the global consequences that the Columbian Exchange had on the availability of food. Scale is important, as is the extraterritorial character of exchange. Harari argues that Western Europe's discovery of the Americas eventually created a global vision that could not have been generated by pursuing Eurasian transregional linkages alone (Harari 2014: 288).

It is no coincidence that this dramatic transformation in human food resources preceded the equally dramatic late eighteenth-century transformation in human technological capabilities we call the Industrial Revolution, but which might equally be termed an energy revolution. It and subsequent revolutions were unintended consequences of the globalization of human connectivity; the societies that benefited most were those most able to transform themselves – knowingly or otherwise – and ride the wave of change. There was nothing inevitable, cultural, or civilizational about these transformations, however. If anything, they reinforce the idea of complex and reflexive interactions.

Innovation and invention are never easy, and throughout human history few accidental discoveries are replicated independently. Instead, utility ensures rapid replication, but the most important ingredient is connectivity. Writing is a classic example, but so too is industrialization. As a result, many historians argue that the highly competitive and connected societies that emerged along the European subcontinent's Atlantic shores were more disposed to grasp opportunities when they arose than the larger continentally fixated Asian empires, or the sparsely populated, poorly connected African kingdoms (Ferguson 2011; Landes 1998). But this, too, is a misreading of the past and more particularly of the nature of globalization.

Such 'European' competitive advantage should not be understood as a Western triumph, a demonstration of Western superiority and civilization. To understand globalization we need to suspend the values and judgements inherent in preceding eras that still linger fitfully in the wake of humanity's great transformation. These include values and judgements derived from the sense of Western triumph that accompanied the early lead of a small number of European countries deemed to be historically and culturally linked: the Atlantic seaboard countries and, later, their settler colonies.

This interpretation of change transposes proximity for civilization and introduces an element of competition where none existed. Thus Western civilization triumphed over Eastern (and Islamic) civilizations, creating by the eighteenth century what is known as the Great Divergence. This is not to suggest that divergence did not occur, but rather to question the parameters used, much as Alexander Geurds questions the cultural divisions usually assigned to the Americas (this volume). It is better to discard cultural cluster notions across the continents in favour of diffused unity continuums. There was no Western triumph, although it is easy to understand why late nineteenth-century Europeans might have held such an assumption as they gazed over their global empires. Instead, the story is more prosaic.

Historians especially have been slow to disengage themselves from old perspectives. Many still privilege Western initiatives as the motor for global change over the past 500 years, not because they continue to hold the racial or cultural views of their forebears but because the notion of Westernization has become so ingrained in modern cultures. In former colonies students were taught that Europe was the sole cradle of modernity, that familiarity with the West was a precondition for understanding history, and that their histories would replicate a similar national focus (Sachsenmaier 2011: 15, 19–21). Hence any attempt by colonial subjects to acquire knowledge from Western power centres was and still is interpreted as Westernization rather than the age-old desire of humans to emulate success and strength. Hodos reminds us that the Hellenization of the Mediterranean is similarly misunderstood (Hodos 2010). Western Civilization has also been a popular subject in American academia until recently, and notions of a distinctive West in contemporary discourses on the rise of China and India constantly remind readers of its fading superiority.

Understanding change has been made more difficult also because historians have long shunned the big picture. In the nineteenth century, nation-states captured their attention and since that experiment delivered global tragedy in the early twentieth century, many have been drawn instead to the detail of diversity (gender and ethnic studies) or simply the detail itself (foods, technologies, ideas), believing, perhaps, that 'the secret of the forest is in the trees' (Nairn 1981: 332).

Universities, where many historical studies are generated, are themselves mostly creatures of their nation-states; few are global in staffing or curriculum. Additionally, the growth of discipline specificity has increasingly isolated academics from each other. This has left academia unprepared for the global turn; any locally based, nationally oriented individual trying to cope with the multidisciplinary complexity of the world's many parts faces difficulties, lacking the necessary knowledge and insights into other languages, cultures, and regions (Sachsenmaier 2011: 238). Developing a global perspective and framework is never going to be easy (Gills and Thompson 2006: 4). Indeed, finding new ways of looking at the world – not recycling the old – is the grand contemporary challenge (Ghemawat 2011: 4).

Seeing the world for what it is, 'a sphere spinning in space' and all people as humankind (Held *et al.* 1999: 369), is a useful starting point. As Andre Gunder Frank once warned, if you look only under the European street light you won't see much beyond Europe (Frank 1998: 48). But the task is formidable when many of our descriptions or thinking of the world remain frozen in a time warp. We talk of the Middle East instead of West Asia, or of Europe as a continent in its own right, rather than a subcontinent of Eurasia, or, more correctly, Afro-Eurasia or Afro-Asia. Such confusion allows us also to present Europe as an integrated whole, which it has never been. Unfortunately, Niall Ferguson is not alone in arguing that 'The first version of the West – Western Civilization 1.0 – arose in the so-called Fertile Crescent . . . and reached twin peaks with Athenian democracy and the Roman Empire', which he calls the ancient West (Ferguson 2011: 17). Even Ian Morris's path-breaking study of Eurasia pursues this line, largely by ignoring South Asia and its linkages with both West and East Asia (Morris 2010, but less so in 2014). The culture of classical antiquity (let alone Mesopotamia) or its impact was never solely European. Rather, it was the product of large-scale interactions across Eurasia, with consequences experienced widely; Keane has argued that the Greeks would not have become Greeks without contact with people to the east and points out that Athens as democracy's birthplace was a nineteenth-century invention (Keane 2009: 101–55). Thus, the achievements of one community were quickly indigenized, and became the traditions of others, which might never have happened had Europe not been part of the Afro-Eurasian land mass (Langdon 1999: 204). Even Europe's Renaissance 'rediscovery' of its classical roots was the product of cross-fertilization between Islam and the West. It was also 'an accentuation of uninterrupted Western self modelling on ancient Greece and Rome' (Fernández-Armesto 2009: 122, 317) by elites who downplayed Europe's migrant roots (Darwin 2008: 31).

It has been commonplace to think of the Renaissance, Reformation, and Enlightenment as uniquely European transitions that set it on the dynamic path to modernity. But aspects of these important transitions found independent expression elsewhere across Eurasia; especially in commercially expansive Song China, which experienced its own Renaissance several centuries earlier and first pushed Eastern social development ahead of the West (Morris 2010: 417–26). Anti-institutional stances similar to Protestantism also occurred within Islam (Fernández-Armesto 2009: 272). The European transitions did not always herald new ways of thinking about science or capitalism not already practiced across much of Asia or transform Europe's growth trajectory prior to the nineteenth century. Even the more recent Enlightenment thinking was something of a chimera, conceived of very differently among the educated elites who promoted it. In France, it justified enlightened despotism and submission to the 'general will'; in the US, freedom with slavery and Amerindian suppression; and in Eastern Europe, continuing serfdom. Only a century or more later did it intellectually morph into *the* cohesive Enlightenment movement we acknowledge (Himmelfarb 2004). What is often missing in analyses of these transitions is their alignment with periods of strategic commercial success. At different times some European states – like the Phoenicians, Greeks, Romans, Arabs, Turks, Indians, and Chinese before them – were able to profit from eastern Mediterranean trade or use the wealth generated from new Asian and American commerce to remake their societies. The result was always a great burst of intellectual creativity and social development, which enabled trade to demonstrate its viability as an alternative to conquest (Snooks 1997: 264–65).

It is odd that so many features used to justify Europe's uniqueness and dynamism should prove so lacking in coherence or direct application. Many historians make much of the contrast between Europe's geographically fragmented polities, which drove competition, military prowess, and state efficiency, and the monolithic conformist East Asian empires with unstable borders to defend (Ferguson 2011: 33–41). But fragmentation does not explain Europe's nineteenth-century transformation. Nor does it sit well with the idea of a singular Europe or Western model that empowered the world (Sachsenmaier 2011: 157). Spain and Portugal, the supposed forerunners of European modernity, remained feudal states, impoverished and bankrupted by their courts' ambitions and extravagances. Religious strife and civil war similarly tempered England as an economic success model until the late seventeenth century. Only small and industrious Holland – sometimes presented as the first modern state (Taylor 1996) – seemed to break the mould. Europe was never a single entity or, in and of itself, the harbinger of modernity. Its societies were as regressive, reactive, culturally introverted and insensitive as any (Darwin 2008: 200). It did not collectively own or control modernity; globalization was never a Western project.

So what happened to dramatically transform the world? Let us return to the notion of connectivity we started with. Ghemawat has argued that distance is important in shaping relationships and that connectivity does not equate with convergence (Ghemawat 2011: 315, 40). The closer we are to people the stronger the relationship and cross-fertilization possible. Clearly, connectivity and its impacts will always be stronger where distances are smaller. This explains partly why neighbouring regions appear to have much in common and widely separate regions do not. Throughout much of human history interconnectivity did not directly involve large distances. Even where it did, traders rarely travelled the full length of the exchange. Invariably, the result was a chain of small exchanges that in total was never global; in fact they rarely exceeded one-third of the world's land surface (Flynn and Giráldez 2006: 244). This is not to suggest that such exchanges were without great influence, particularly when after the first millennium they were focused on the Indian Ocean, itself connected with the world's largest, most successful economy (e.g. Niziolek and Respess this volume; Miksic and Goh this volume).

The historian who most reoriented our thinking on globalization and its role in making the modern world is Filipe Fernández-Armesto. He asks us to consider China as modernity's source; Europe was poor, backwards and prone to get-rich-quick schemes with little economic growth impact (Fernández-Armesto 2009). In addition, Europe was far from the centre of human economic activity, its markets were small and trade faced massive transaction costs. China, on the other hand, was huge. Its population was twice Europe's in 1400 and expanded more rapidly to over 300 million by 1800, partly because it was best positioned to benefit from trade growth and Eurasian wealth that followed the end of a climatically and plague-induced long recession in the fourteenth century and start of the Columbian Exchange (Frank 1998: 78–117). Linked to the rest of Eurasia through the Indian Ocean and Baghdad silk road, with over 50,000 km of canals and river networks, and 10 per cent of its population urbanized, China's sheer size and agricultural and craft productivity made it different. Moreover, many of the transformational initiatives that facilitated modernity originated in China: paper and printing, gunpowder, blast furnaces, coal exploitation, paper money, direction finding, shipbuilding technologies, and scientific empiricism. 'So in science, finance, commerce, communications, and war', Fernández-Armesto notes, 'the most pervasive of the great revolutions that made the modern world depended on Chinese technologies' (Fernández-Armesto 2009: 25).

Additionally, China bore all the hallmarks of a modern state: internal sovereignty; central government; unified administration, laws, currency, weights, and measures; bureaucrats appointed on merit; and good internal communications (Fernández-Armesto 2009: 212). In fact, as David Reynolds notes, it bore a striking resemblance to the modern United States. Indeed twentieth-century USA was the new China: a large polity with a common currency, no internal tariffs, excellent communications, and whose sheer economic scale enabled market dominance (Reynolds 2002: 245–52). Being so large, both countries had little need for external trade and saw themselves as relatively complete or self-sufficient. External trade was not their growth engine. In other words, size and unity, rather than fractious fragmentation, could also be advantageous.

Modernity is a relative term; it can also hold contradictions. Just as modern America harboured slaves and Britain maintained a ruling elite, so China sheltered a costly imperial family and an increasingly self-serving Confucian bureaucratic class. Neither assisted the agrarian country to garner the necessary finances to maintain effective government and military strength, especially when threatened externally. On the other hand, unlike the European Atlantic seaboard countries, it did not need to launch aggressive foreign policies to enrich itself. Its northern and southern parts enabled a tremendously diverse and well- connected economy that had already expanded westward into provinces like Sichuan. Under the Qing dynasty, land cultivation doubled and agriculture commercialized. No wealthy urbanized country existed close to its borders to distract it from its own huge economy. In that sense, China was inward looking, much like the United States prior to World War II. And it survived, precisely because, unlike many other empires, it did not see its future in costly and often misjudged external interventions (Darwin 2008: 125).

Nonetheless, China's link with the vast Indian Ocean trading network conspired for a time to make that sea the world's richest economic zone. Trade has always been easier by sea, and the Indian Ocean's seasonal monsoons made it easy to cross. Muslim traders connected West Asia and East Africa with India and Southeast Asia, the latter already teaming with Chinese merchants and their diaspora. Demand for spices mostly drove this activity. Few spices found their way to Europe, and what did was so ridiculously expensive that demand for them could only ever have been the result of elite desires to display wealth ostentatiously (Fernández-Armesto 2009: 239, 17). Nonetheless, that demand, and the windfall profits enjoyed from supplying it, drove socially ambitious European adventurers and apocalyptically minded rulers to find ways jointly to link directly with the riches of the East, make their fortunes, and possibly change the course of history. In this they were only partially successful, but it was nonetheless what began to make some European states distinctive. In turning to the sea to end their marginality (Morris 2014: 178–83), they created new forms of connectivity that overturned old ways of understanding the world.

After 1498, Europeans did penetrate the Indian Ocean but for a long time they were unable to capture its trade and were confined to 'the archipelagos and fringes of mainland Asia' (Flynn and Giráldez 2006: 240). Even if they had, European markets were too small to accommodate it. De Vries argues that between the 1630s and 1800 the total volume of goods sent annually from Asia to Europe approximated 50,000 tons, the carrying capacity of a large container ship today (de Vries, 2010: 718). Even with regard to the spice trade, European intervention only altered its shape to a limited extent; 60 per cent of production still went to China. Lacking goods to exchange, Europeans survived by becoming Indian Ocean traders, such was the shortage of shipping to cope with the massive and growing Asian demand for goods. But it was a precarious existence. England and Holland formed large monopoly companies to reduce the risk inherent in long-distance trade, but these companies had still to operate in competitive markets to purchase and – outside of their national markets – sell their products. Although many of these eventually became mass consumption goods (tea, cotton textiles, silk, porcelain, and coffee) and laid the real foundation for enduring social development, companies could only survive by finding new sources of revenue to subsidize their trading operations, especially once such commodity production spread outside Asia. Hence the Dutch and English Asian trading companies, despite being revolutionary pioneers in mobilizing capital, increasingly sought political revenue instead (effectively becoming colonial conquerors), and – in the British case – India–China trade monopolization as well. Being exclusive in nature, neither strategy proved sustainable. As de Vries notes, the impact of European demand on Asian trade was marginal; at best it had local or regional impact. Undoubtedly, its greatest impact lay in globalizing foods and products, but the result was not a single world economy (de Vries 2010: 722–27).

However, Europeans were additionally fortunate in being able to profit from the growing disparity in the value of silver within China compared with the rest of the world. The reason lay in the development of another regional economy that would eventually rival the Indian Ocean in wealth. Atlantic Ocean trade gave a few European nations – those located on the new trade routes and hence the beneficiaries of connectivity – the opportunity to leave behind their wretched poverty. At one time, their geographic location had doomed them to marginality. Now, the closeness of sea-oriented countries to the Americas bestowed new opportunities once they had discovered the continent. The Americas provided land on which to grow many of the products previously obtained only from Asia. Additionally, it provided fuel that enabled sugar to be turned into a mass consumption good. And importantly, it provided huge silver reserves that permitted countries like Spain to buy their way into Asia. Silver created the first global monetary system, inflating prices in the smaller European markets and shifting manufacturing to its northwest. After Spain established its base in Manila in 1571 to supply China with Bolivian and Mexican silver, silver linked the world (Flynn and Giráldez 2006: 244). But this trade soon paled in comparison with Atlantic trade. By the 1770s, the volume of goods crossing the Atlantic was four times greater than Europe's Asian trade, and growing at over twice the average rate (de Vries 2010: 717–18). By bringing the Americas into the European world, European resources were vastly increased, and the eclipse of 'long-hegemonic empires and economies in Asia made possible' (Fernández-Armesto 2009: 4), although not guaranteed. Not everyone agrees that the Americas made an immediate difference. Jonathan Healey posits northwest Europe's lead in social development during the seventeenth century, well before the Americas had been exploited and scientific developments had wide impact (Healey 2011). Morris reasserts geography's importance. Unlike the steppe-fronting Eurasian empires, the fractious west European states confronted each other. Hence their dependence on infantries and gun technology, which they eventually used against weakening Asian empires (Morris 2014: 176, 198–99).

Nonetheless, it is important not to assume that any rebalancing of world economic power necessarily led directly to contemporary globalization. None of the European players in either the Atlantic or Asian trade were fated to become global powers simply because of their roles in creating a new kind of empire that stretched across seas (Morris 2014: 203). Spain and Portugal, the original explorers of new knowledge, soon lost their early promise and never integrated their colonies into their economies or used their earned wealth to create sustainable growing economies (Darwin 2008: 65; Harari 2014: 288–91). The Dutch were too small politically and ultimately tied their fortunes to England. French empire building stumbled through fiscal crises, stagnation and revolution, and eventually enveloped Europe in a devastating tribute war. It has been argued that across Eurasia, natural and man-made resources struggled to sustain rising living standards (Flynn and Giráldez 2006: 243). Some European countries were undoubtedly advantaged by their ability to use the Americas to compensate for their own shortfalls, but there was nothing inevitable about their ability to transform that into a new kind of economy. Indeed, European expansion appeared to peter out during the eighteenth century, with most states mired in debt and conflict (Darwin 2008: 104).

There was only one country where, uniquely, labour costs were high and energy cheap. Britain was a beneficiary of early globalization. It was also fortunate that its geography partially distanced it from mainland European politics, and that by the late seventeenth century it had concluded its own political and religious wars. The resulting power sharing created space for expanding commercial activity and social development. But internal growth alone did not drive change. What made the difference was England's connectivity with the world and its preparedness to glocalize, to reshape itself for a global world. Like the Netherlands, its early woollen trade success provided the platform for eighteenth-century growth, when colonies additionally provided natural resources and extra demand for manufactures. Urbanization (particularly the rapid growth of London), manufacturing and international trade stimulated agricultural productivity, improved living standards, literacy and technical training, and maintained high wages. The country did not stagnate. Instead, high wages drove rising prosperity and the use of capital and energy to raise output without increasing costs. It helped that Britain possessed readily available cheap coal fuel to compensate for the loss of its timber resources. The conversion of fossil fuel into energy, initially for its rapidly growing urban population, laid the basis for the textile industry's industrialization. Britain was additionally blessed by cheap raw materials from India (and North America) and its growing ability to restrict Indian textile competition at home and in its colonies, and to use opium to reduce its Chinese trade deficit. Importantly, a mass consumer market already existed within Britain due to the country's connectivity to Asia and the Americas and its high wages, themselves a product of Britain's foreign trade boom. The sheer size of the global cotton industry helped ensure that Britain's technology became globally transformative (Allen 2011).

The late eighteenth century might be called a moment of historical mutation. Quite uniquely and unexpectedly, one country transformed itself sufficiently to enable linear economic growth. Henceforth, growth-inducing technology would drive trade, generate new wealth, give new relevance to scientific enquiry, and transform governance and popular consumption (Snooks 1996: 374–76, 415–26). In doing so, it completely altered the goals of all societies thereafter, although not conquering ambitions and the desire for windfall profits, which many leaders still saw as essential to offset the destabilization change generated. Ultimately, Britain failed to appreciate the importance of its achievements. Its growing empire did not sit well with a globalization process that increased human interactions and made one community's wellbeing increasingly dependent on the wellbeing of others. Immutable inequalities diminish the potential for markets to expand, stimulate technological innovation, and raise human capital.

Nonetheless, countries closest to Britain were among the first to appreciate the implications of its achievements for the balance of power and to respond accordingly, especially once technology costs fell and offset the value of cheap labour; hence the importance of economic distance and tendency to view industrialization as a European phenomenon. Yet the European and North American countries that transformed themselves did not do so because they were European or shared a common heritage with Britain. They did so because Britain was too great a model to ignore. Imitation, as we have seen, has a long human history, only this time its scale was global. Within a relatively short time, even distant countries like Japan did likewise, although others, destabilized by or captive to the interests of transforming nations, were simply unable to respond independently. However, once freed from such constraints, they too transformed themselves. As noted above, the result has not been homogeneity but complex and reflexive interactions. To call such responses 'Westernization' (like Mediterraneanization or Sinicization) not only denies agency to much of the world, but also bestows 'Western' origins on a process of interconnectivity that has always belonged to humanity globally. Industrialization was the unforeseen child of globalization.

If we persist in seeing the world as divided between East and West, we will continue to project that vision onto its history. The world is not so easily divided, not even when limited to Afro-Eurasia. There were always connections between its many parts; people, ideas, trade goods, foods, and disease constantly moved and enriched or endangered communities and regions differently. Usually the products of connectivity were indigenized and transformed. Columbus's arrival in the Americas accelerated the process but did not create a world neatly divided between a passive East and dynamic West. Europe's geography and political fragmentation did create a difference, which proved an advantage most when driving new linkages to the world or sustaining military innovation and power projection, but a disadvantage when adventurism turned inwards. Europe's political fragmentation drove a fierce competitiveness not seen elsewhere on such a scale. In the end, the outcome was not a European transformation but a northwest European one. More specifically, it was a British one. Only Britain enjoyed the civic mindedness, high wages, cheap energy, global connections, and market size to make it possible.

This great transformation – which no one anticipated, let alone planned or knew how to manage – did not derive from civilization but from the world's growing connectivity, and its most obvious corollary was that all peoples could benefit in some way if they responded appropriately. One of its most important dynamic outcomes has been democracy. Amartya Sen calls it humanity's common heritage (Sen 2000: 38). Commercial and technology-based societies depend for success on wider resource ownership (economic democratization) and political franchises. But there exists also a second, equally dynamic, defining outcome of globalization. People still live very local and surprisingly parochial lives, but they do so today within a dynamic global frame that penetrates their consciousness as never before and variously subsumes all cultures (now both transformed and more fluid) within it, not equally and not evenly, but certainly never monolithically. This most marks globalization today from its precursors, especially in its tensions between the economic and political, although it might be argued that this tension existed also in Mediterraneanization or Sinicization.

Two hundred years after globalization precipitated the greatest change in human societies, we should no longer view modernity as Westernization. Yes, a few formerly marginalized European countries exploited and enhanced globalization processes but they did so because they needed to connect with a world with much to offer in order to enrich their own communities. Yet they – like the rest of the world – had also to learn that to sustain modernity they had to transform themselves and desist from promoting exclusionary strategies that produced only winners and losers. These lessons of globalization were rarely understood in the past; it might seem today that each generation has always to relearn them. After all, the health of humanity today is as dependent on Asian wellbeing as on American or European comfort, or, for that matter, African success. An interconnected world will always be greater than the sum of its parts.

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2.1

Africa in and of the world

Archaeological perspectives on globalization in the *longue durée*

Paul J. Lane

Knowing where to begin with Africa, as a continent, an idea, a well-spring of identity, or as lived reality, can often present particular challenges, although maybe rather different ones, for both external observers and those who lay claim to it as their ancestral home (whether they now live there, or not). This is certainly true when attempting to link 'Africa' and 'globalization'. Conventional wisdom, and probably the majority of popular opinion in the West, most likely would suggest that the continent has only relatively recently, say since 1945 or thereabouts, been touched by the forces of globalization, and that overall neither Africans nor their continent have been especially well served as a result (see essays, for instance, in Shizha and Diallo 2015). There might be some acknowledgement that European colonial powers still held sway, at least in name if nothing else, over the greater part of the continent in 1945 and in some areas had done so for several centuries. But prior to the end of Empire that the conclusion of World War II presaged, convention and popular opinion in the West, even in the second decade of the twenty-first century, are still quite likely to imagine that the tasks of the colonizing powers prior to the outbreak of war had been opening up the continent for commerce and, although perhaps out of political correctness no longer articulated as bluntly, holding savagery at bay.

This may well seem something of a caricature, an attempt to create a straw man that ignores all the changes in attitude and efforts made in these postcolonial times to recognize and celebrate 'things African'. African music, from Highlife to Raï, Township Jazz to Kwassa Kwassa, has certainly attracted a global audience since the mid-twentieth century, especially as part of the created category of 'world music' (e.g. Collins and Richards 1989), as do contemporary hybrid fusions of African genres with Rap (Charry 2012), and the Afrobeat tradition inspired by the music of Fela Kuti (Olanyian 2004). Contemporary African dance, art, and literature are similarly increasingly popular and influential globally, although the reception, and to some extent the promotion, of both African art and dance are often hampered by a seeming attachment to the monikers 'traditional' and/or 'authentic' (for elaboration of this point, see, for example, Douglas *et al.* 2006; Poulter 2011). African political and cultural leaders have also sought to refashion Africa's image, perhaps most obviously and overtly through the promotion of the idea of an African renaissance (Asante 2007) and the African Union's New Partnership for Africa's Development (NEPAD), launched in 2001 (Chabal 2002). While the actions of the continent's politicians have often done more harm than good to this positive presentation of Africa and the accomplishments of its diverse populace, there was a brief moment when Western leaders of the G8 countries and the United Nations seemed ready to engage with the continent in a new way (Black 2012). At much the same time, the People's Republic of China was also reorienting its approach to supporting Africa by bringing this more in line with the restructuring of its internal economic policies initiated a few decades earlier (Anshan 2008).

Fifteen years on, however, most impartial observers would argue that both NEPAD and the policy shifts promised by Western governments, but not always delivered or consolidated, have been only partially successful – although there are different views on why this has been the case. Moreover, in the public sphere, Western imaginings of the continent remain dominated by the idea of Africa as a single entity, as exotic, often dangerous, still largely wild and untamed, a land of adventure – for the adventurous. But this view of Africa, as the Kenyan author Binyavanga Wainana (2005) famously satirized, is also mediated by images of poverty, vulnerability, 'tribal' warfare, corruption, and failed states – all problems that, depending on perspective and to some extent political leaning, either demand urgent attention on the part of the international community, or soak up tax revenues that could be 'better used' to alleviate the plight of the poor, the sick, and the elderly at home. Either way, for many, the billions of dollars redistributed in donor aid to African countries each year are testimony to failed globalization both in the post-World War II era and in earlier centuries. Otherwise, why would such aid still be needed?

At the other extreme, both in a temporal sense and more metaphorically, we could say that globalization began in Africa, as this is the continent where not only our own species but also our hominin ancestors first evolved (Foley 2013; Lahr 2013), and from which they spread to colonize the rest of the world (Fleagle *et al.* 2010; Stringer 2014). Archaeology courses and text books constantly remind us of these facts, even though certain aspects including the direction, timing and drivers of each exodus, and even whether all hominin species first evolved on the continent, can be hot topics of debate. An unspoken sub-text to many of these debates, though, is just what does it mean for a continent to lay claim to the origins of our species and modern human behaviour? The DNA ancestry of all of us confirms that as a species we originated there, but any suggestion that we are all globalized, hybrid Africans is far too destabilizing for most contemporary sensibilities (but see the T-shirt produced and sold by the Richard Dawkins Foundation). No, No, No! This heritage you are talking about, this is *our* heritage, not just Africa's but humanity's – and don't you forget it!

Between these opposing views of Africa and Africans as originators of, and failures at, globalization, lie multiple other, and more nuanced positions, several of which are explored by the contributors to this section with reference to elements of the continent's vast and complex archaeological and material cultural heritage. One theme, among others, that cuts across these papers is connectivity. As several of the authors point out (see also Mitchell 2005), archaeological research has done much to uncover evidence for extensive, long-standing and complex connections between different areas of the continent and other parts of the world that were in existence many centuries, and, in some cases, millennia ago. Yet, as Scott MacEachern notes, evidence for connectivity, even if on quite a large scale, does not necessarily imply globalization. Thus, as he elaborates, different communities across West Africa were intimately connected with trading partners in North Africa and through them with many parts of Europe throughout the medieval period. These ties almost certainly have much older roots, and it is well known that changes in one area, whether of a 'technical' nature, such as developments in ship-building technologies in later medieval Europe or the introduction of camels into North Africa – both of which impacted the scale of contact and its directionality – or in other domains, had consequences for actors at either end of the trade and production networks, and in other localities. We are all too familiar – from our own era of corporate globalization – with these kinds of stories and the mixed legacy of misery, violence, and environmental catastrophe alongside fresh employment opportunities, business stimulus, and even improved labour laws they can leave in their wake. Yet, archaeology's analytical frames of reference and modes of practice do not lend themselves especially well, as yet, to exposing the winners and losers of ancient globalization. Far too often, as MacEachern's chapter makes abundantly clear, attention is directed toward documenting connections rather than understanding their consequences.

Connections may not simply be material; they can equally be manifest more intangibly – including ideologically, spiritually, or ethereally, as explored, respectively, in the contributions by Miguel John Versluys, Chapurukha Kusimba, and Julia Verne. The presence of late second millennium BCE obelisks in the Piazza del Popolo, Rome, and in the Place de la Concorde, Paris, or the widespread borrowing of other Egyptian motifs and architectural styles that became popular in Europe and North America especially after Napoleon Bonaparte's invasion in 1798 (MacDonald and Rice 2003), may seem the epitome of material global connections. But, as Miguel John Versluys discusses, Aegyptiaca have not only been circulating elsewhere on the African continent and throughout the world for far longer (the obelisk in the Piazza del Popolo was, in any case, originally brought to Rome around 10 BCE by Emperor Augustus), but have also worked to assemble and re-assemble more intangible essences of Egypt among their new hosts. Ideas of Egypt have circulated with these objects, creating and projecting particular values the West now lays claim to as its own. In terms of Western civilization, Africa, to use Versluys' term, 'got things going'; testimony yet again that certain globalization process may have begun in Africa.

The east coast of Africa, from Cape Guardafui (Somaliland) in the north to Delgado Bay (Mozambique) in the south, like large parts of West Africa, has been globally connected for centuries, and the inhabitants of this vast stretch of coast, as on the opposite side of the continent, have absorbed and transformed cultural influences from very different worlds, making them as much their own as anything foreign or borrowed. A central feature of the success of these connections from the late first millennium CE onwards, not just in terms of trade networks but also in more cultural terms, was the existence of a shared religion – Islam. Evidence for shared religious connections, as Chapurukha Kusimba explores in his chapter, may in fact provide a better indication – than the mere presence of exotic trade goods – of how and when people on opposite sides of the Indian Ocean and in the neighbouring Red Sea and Persian Gulf recognized that they were part of a larger world comprising many spatially distant but nonetheless connected communities of practice, and began to define themselves with reference to these absent worlds.

The interplay between absence and presence, and their mutual constitution of each other as part of an increasingly globalized world, is evident too in Julia Verne's discussion of one of the most preeminent symbols of modern globalization on the African continent today – the mobile phone. These small, increasingly discrete but all too frequently irritatingly intrusive objects have been, and remain, important actors in contemporary Africa. The rate of adoption of mobile technologies and the mobile phone as an essential to everyday life across the continent over the last quarter century has been phenomenal, bringing distant diaspora communities into ready contact with one another, and, through local initiatives and innovations, they have pioneered the movement of money around the continent without the involvement of the national or international banking systems. Processes of appropriation and adaptation, technological imperialism and resistance, information exchange and the hybridization of knowledge and personhood are all played out through, and expressed by, the use of mobile phones in contemporary Africa. Most critically of all, however, as one of Verne's informants notes, these small items easily forgotten, like monumental Aegyptiaca, 'allow you to know things'.

Finally, no discussion of globalization on the African continent would be complete without some consideration of empire and colonialism. These have been such a feature of the continent's history, and not just since the European Age of Exploration, that it is impossible to not to link them to globalization, as Lydia Wilson Marshall notes. European colonialism during the nineteenth century, as she makes clear, did not initiate globalizing processes (and contrary to its own rhetoric, effectively made the continent darker than it had been before – see Brantlinger 1985), but it certainly initiated new processes, changed the direction of connections, created new arenas for resistance and revolt, and altered Africa's place in the world. Archaeological research on these encounters is more limited than in the Americas, but as the examples Marshall discusses illustrate quite clearly, there is always something new out of Africa. What particularly stands out is the value of studying African contexts for enhancing the understanding of the 'production of locality' (Richard 2013: 43) under very different forms of globalizing colonial encounters (and not just those imposed by Europeans). In this regard, the African continent is especially rich in contrasts, and archaeological study of these is an effective means of destabilizing more dominant interpretive models.

As European influence across Africa has waned, especially since the late twentieth century, so China's role in shaping Africa's futures has increased. The last few decades have witnessed, in particular, massive investment on the part of China in large-scale infrastructure projects on the continent and a related upsurge in the demand for diverse raw materials. The number of Chinese-owned small business has blossomed, and, as incomes have risen in China, so Africa has become an increasingly popular tourist destination for middle-income Chinese people. All of this has helped create jobs, and has contributed in part to the economic boom the continent has experienced since the turn of the twenty-first century, with overall GDP rising between 5 and 6 per cent a year (*The Economist* 2015). Yet it has also had less positive impacts, including on the continent's cultural heritage, as discussed by Paul Lane, Cornelia Kleinitz, and Yongliang Gao. Precisely what these impacts are, and where they have been most severe, is hard to gauge because of under-reporting and the secrecy that can surround many of the Chinese-funded projects. What is clear, however, is that the funding needed to assess potential impacts and for mitigation projects, including excavation, has rarely been made available, leaving local archaeological services to bear the brunt of the costs, both financially and in terms of the loss of knowledge arising from the destruction of sites and monuments. This new wave of globalization on the continent has also left new kinds of friction between local communities and the state in its wake, in which archaeologists have sometimes found themselves inconveniently entangled.

Friction (Tsing 2005), between people, things, places, memories, beliefs, practices, ideas, and systems of government, rather aptly sums up the many paradoxes of globalization. Globalization, despite its universalizing tendencies, is always variable and partial, dividing as frequently as it unites, rubbing things the same way and rubbing things up the wrong way. As the chapters here illustrate, the frictions of globalization have certainly created tensions and dissent in Africa, but then they have also created innovation and desire, and these opposing tendencies will continue to inform globalization across the continent.

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2.2

Exploring Aegyptiaca and their material agency throughout global history

Miguel John Versluys

Introduction: Aegyptiaca in Africa

When excavated at the beginning of the twentieth century, the largest tumulus in the city of Kerma in Nubia (dated to the period of 1700–1550 BCE) was discovered to contain a life-size seated statue of an Egyptian woman named Sennuwy, together with part of the statue of her husband Djefaihapy (Figure 2.2.1). This led the excavator, George Reisner, to believe that Djefaihapy was the Egyptian governor at Kerma and to interpret the site as a trading post run by Egyptians. Evidence found later and elsewhere proved him wrong. Kerma was the capital of a powerful and independent state that arose in competition with Egypt, and it turned out that Djefaihapy was the provincial governor of Asyut (in Middle Egypt) during the reign of the twelfth dynasty pharaoh Sesostris I (around 1971–1926 BCE). Both statues were thus re-used in the Kerma tomb when they were already antique, and had been brought to Nubia from a far-away tomb or temple in the Nile valley (Bard 2008: 199–205).

Situated at the lower Nile that meanders through north-east Africa, the mid-second millennium BCE kingdom of Kerma made extensive use of Aegyptiaca: *objects that can be characterized as distinctly Egyptian through their stylistics and the materials from which they were made*. Kerma is well known for its large and impressive royal tumuli, dating roughly between 1750 and 1500 BCE, the so-called *Kerma classique* period (Bonnet 2004). Many Egyptian statues dating from the period of the twelfth and thirteenth dynasties (*c.*1991–1663 BCE) have been found in those burial mounds, like those of Sennuwy and Djefaihapy, as well as in temples from that period. But also more mundane Kerma grave goods may consist of Egyptian artefacts that were robbed from earlier Egyptian graves in Lower Nubia (Valbelle 2004). Appropriating (ancient) Aegyptiaca apparently mattered a lot within Kerma at the time.

During later periods of the region's history, the importance of Aegyptiaca would also remain paramount. During the (early and mid-first century BCE) Kushite period, for instance, Nubian material culture often looks so distinctly Egyptian that scholars have talked about *Egyptianisation* to account for what was understood by many as the Egyptian face of Nubian civilisation (Edwards 2003 and Török 2011 provide an overview of the debate and illustrate different views). In that period, these kinds of 'Egyptianisms' were visible everywhere in north-east Africa. The famous pyramid field at Jebel Barkal (Napata) constitutes a remarkable example (Figure 2.2.2).

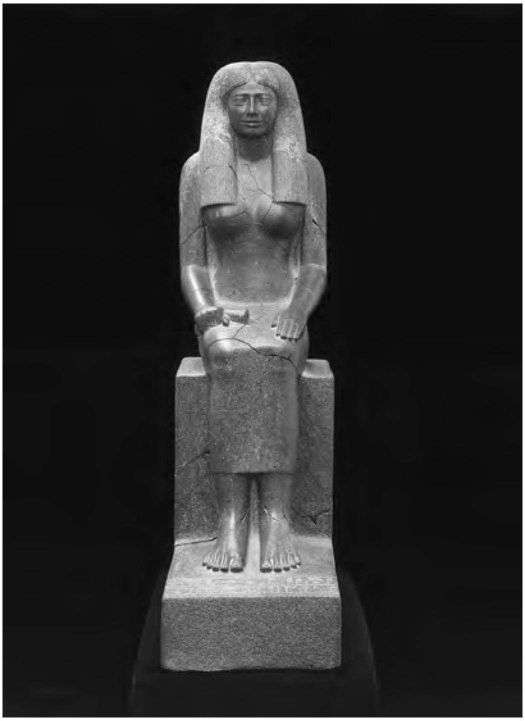

Figure 2.2.1 Statue of Lady Sennuwy, Egyptian, Middle Kingdom, Dynasty 12 (1971–1926 BCE), found in Nubia, Kerma, Tumulus K III, hall A. Made from granodiorite. Museum of Fine Arts, Boston, 14.720. Harvard University – Boston Museum of Fine Arts Expedition

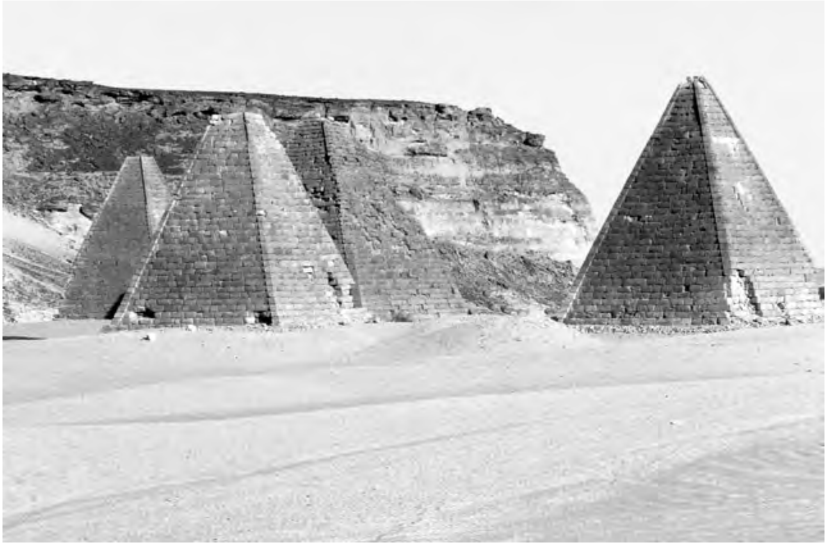

Figure 2.2.2 The pyramid field at Jebel Barkal, Napata. Maurice Chédel via Wikimedia

But also in Alexandria – traditionally considered to be a distinctly Greek city that just happened to be located *ad Aegyptum* – Aegyptiaca strongly determined its (out)look and cultural character, as recent research continues to show (Savvopoulos 2010).

That we deal here with *intra-cultural connectivity* rather than with *inter-cultural connectivity* (or acculturation; see Knappett this volume; Versluys 2014) is underlined by the observation that these different forms of African Egyptianisms might even have been 'talking' to one another. Baud (2010) has argued that Nubian Egyptianism is heavily influenced by Napata and its archaising tendencies on the one hand and, on the other, by the Hellenising forms of Egyptianism emanating from the Ptolemaic court. Be that as it may, we can conclude that the impact and agency of Aegyptiaca was strong and pervasive in (north-eastern) Africa, and that apparently only few (historical) contexts were unshaped by them.

Archaeology and globalisation

This brief and selective overview of Aegyptiaca and their agency in north-east Africa served to introduce the central research questions of this chapter and to suggest the need for a combination of archaeology and globalisation to answer them. The questions central to this chapter revolve around understanding Ancient Egypt's global impact and agency and are the following: why are Aegyptiaca and Egypt, visible in so many contexts, to be found in such a great variety of places throughout world history? How exactly are Aegyptiaca able to influence those contexts? And, is there some kind of consistency in their agency over time that might explain their fitness for survival or 'evolutionary success'?

These are, of course, very big questions. The present chapter is distinctly explorative and serves in the first place to establish the relevance of these questions and to develop a hypothesis to tackle them, rather than to provide direct answers. It explores the consequences of taking the combination of material agency (archaeology) and complex connectivity (globalisation) seriously, and will consider different models of the agency of material culture in various places enmeshed in global networks over time (Appadurai 1986; Foster 2006; Knappett and Malafouris 2008).

Archaeology is the discipline of things and is therefore characterised by what could be called a material-cultural perspective (Olsen *et al.* 2012). Human life unfolds from our interaction with both other human beings and with things: it is therefore not fixed and static, but constantly *in the making* (Ingold 2013). One can focus on the human side of this engagement and see human agency as the motor of history. From that perspective, people determine what objects look like, do, and represent. But, as we are increasingly discovering, focusing on human agency alone tells us only part of the story, as material culture equally has its own causally determinant position. Together with people and in a continuous entanglement with them, therefore, things make society (Gosden 2005, 2006). Saying that archaeology is the discipline of things is meant to indicate that in our analysis of this 'society-making', we focus on objects as actants in the first place; while realising, of course, that the outcome we call (world) history is a matter of human–thing entanglement (Hodder 2012). We need this focus on objects as history makers, however, because from the Enlightenment onwards it has been mainly *people* with their *ideas* that have been regarded as causally determinant; the category *goods* has routinely been seen as the outcome of people and their ideas. Without wanting to deny the intimate relations that exist between people, goods, and ideas, a truly archaeological perspective starts with focusing on the goods as actants, without automatically reducing their meaning and agency to the people and ideas they are often made to indicate (Versluys 2015a, 2015b). A material-cultural perspective, therefore, should start by asking the radical question: what do objects want? (Gosden 2005).

The concept of globalisation is, at present, the best way to discuss the functioning and impact of complex connectivity and networks (Knappett this volume; Pitts and Versluys 2015). It can never be used simply as *explanans*, but should always be explained in itself. Saying that a particular historical context is globalised (or not) is saying very little in interpretative terms: we need to account for the specific form, intensity, and functioning of a particular kind of globalisation. Stephane Palmié (2013) has recently made the same point with regard to a notion that is very much related to globalisation, that of hybridity. Just as every context can be called globalised in one way or other, every social fact or object can be called hybrid. Because connectivity existed from the very first day of humankind onwards, it follows that borrowing cultural and material traits existed from that same first day (Bloch 2005: 7). This means that purity is as much a fiction as the fantasy that 'once upon a time there were settled, coherent and perfectly integrated national or ethnic communities' (Greenblatt 2009: 2). Therefore, we should not ask the question *what* is a hybrid, as Palmié (2013: 5) argues, but *when* is a hybrid. I argue that the same is true for globalisation.

A combination of globalisation and archaeology should focus on the role that objects and their agency play in processes of cultural change through connectivity; time–space compression being one of those. An archaeological approach to globalisation is therefore not so much about how objects spread across the world through the intensifying processes of human connectivity. An archaeological approach to globalisation, in my opinion, should be about *how world history is made up of object diasporas* and, of course, the thing–human entanglements resulting from those. In an important article from 2006, Gosden, talking about long-term change instead of globalisation, argued similarly when he stated that 'cultural and material forms existing over long spans of time form a channelling for human beings that helps orient and shape short-term processes and events' (2006: 425). This essay will chart and analyse Aegyptiaca from such a perspective. The introduction has already shown that the impact of Egyptian-looking objects on the people and history of north-east Africa was profound; and this was not the case for north-east Africa alone. In Antiquity, Aegyptiaca are to be found almost everywhere in (the history of) the Nile valley, the Mediterranean, and the Near East and from very early periods onwards. Post-antique globalisation processes also brought Egypt and Aegyptiaca to a great variety of places around the world in a literal way. The Aegyptiaca that were obtained, in 1911, by the Chinese government from Duan Fang, ambassador to the Chinese emperor in Europe, and now on display in Beijing, are but one example of this practice (Clarysse and Yan 2006). In many of those cases, the circulation and subsequent contextualisation of Aegyptiaca resulted, through the agency they were able to exert, in profound cultural changes.

The following section discusses the relations between circulating objects, their agency and cultural change in more depth, advancing *china* and China (Finlay 2010; Versluys 2015a; Pitts this volume) as a useful parallel. I then offer a brief overview of the occurrence of Aegyptiaca in world history, followed by a short case study elaborating on one particular context – ancient Rome in the last decades of the first century BCE – and the human–thing entanglement of Emperor Augustus and an obelisk. Finally, the theoretical and other consequences of this approach will be discussed. If global history is really made up of diasporas of objects and peoples and the thing–human entanglements resulting from those, we should be able to not only chart the many forms of Egyptianisms through time and space, but also to think about their relation to one another.

Objects, agency, circulation, and cultural change

Objects instigate and put things in motion. Material culture, therefore, is as much an *expression* of cultural change, as it should be considered a *catalyst* or *protagonist* in these processes. The public auction, in Amsterdam in 1602, of the cargo from the captured Portuguese vessel *San Jago*, which had such a huge influence on Dutch seventeenth-century *Chinoiserie*, serves as a good example (Pitts this volume). For the first time, *china* was now available on a large scale and not just for elite consumption. This would have major implications for Dutch society in practical and social terms: drinking habits, for instance, would change significantly. But the availability of *china* also had a large impact in more conceptual terms. The Oriental Other was now available at one's own table; and this resulted in shifting views on Europe's place in the great chain of being and world history (Osterhammel 1998). The large amount of *china* aboard the *San Jago* can thus usefully be described and understood as an important protagonist in various stories of cultural change.

Such processes of cultural innovation have recently been analysed in even wider terms for eighteenth-century England (Yang 2011; Zuroski Jenkins 2013). During that period, both China and *china* had come to matter greatly to the English economy and consumerism, constituting an important part of the economic and cultural make-up of society. But the intensified trade with the East Indies would also significantly change English discourses of virtue. The English understanding of morals like taste, subjectivity, piety, and patriotism were profoundly transformed through Eastern values, emanating, or so the English thought, from the Eastern objects that they now had around them. At the very same time, the imagery on *china* and comparable trade goods got other things going as well. Liu (2008) has argued that it played a major role in transferring Chinese gardening ideas towards England, culminating in the English landscaping revolution of the early eighteenth century. More indirectly then, this imagery would impact on new theories about art and aesthetics, such as they have been canonised by Immanuel Kant (1724–1804). To phrase this perspective radically: there would have been no *Critique of Judgement*, this foundation of a European philosophical tradition, without, amongst many other things, the circulation of china and its *Chinoiserie*-style in a European context.

Even a single object could have such a profound and long-lasting influence on European intellectual discourse, as the so-called zodiac of Paris illustrates (Buchwald and Josefowicz 2010) (Figure 2.2.3). These two large sandstone blocks, now in the Louvre, were brought to Paris from Egypt in 1821. It was thought that their depiction represented an ancient Egyptian constellation, and that the zodiac therefore might be able to prove that Egyptian history went back to the period before the Bible. Scientists and intellectuals seized upon the zodiac immediately to discredit Christianity and support their views on the age of the world. Likewise, the royalist and religious parts of French society aimed at discrediting what they called 'an infernal stone from a pagan temple' (Buchwald and Josefowicz 2010: 111). The Enlightenment debate between Science and Religion thus was very much shaped by an Egyptian artefact. The influence of Aegyptiaca on (ideas about) France and Frenchmen became even more paramount in the wake of Napoleon Bonaparte's expedition to the Nile, when Egyptian objects began flooding (western) Europe as commodities. Europeans had long been fascinated by Egypt and questions of how to understand their own position vis-à-vis this old, wise, and mysterious culture (Glück and Morenz 2007). It was only through the (massive) availability of *things* Egyptian that this fascination developed much more generally and widely in society at large. This process is often described as Egyptomania (Humbert 1989). The term Egyptomania is, however, very inappropriate, as it describes as *mania* what is actually a most important process of cultural transference and innovation. This article will not deal with this criticism in depth, but has a very different perspective as it presents Aegyptiaca and Egypt as an important, enduring, and ever-successful 'global commodity'. This chapter, therefore, argues very much *against Egyptomania*.

Cultural responses towards Egypt resulted, amongst many other things, in the obelisk at the Place de la Concorde becoming a Parisian hallmark (Solé 2004). But things Egyptian were

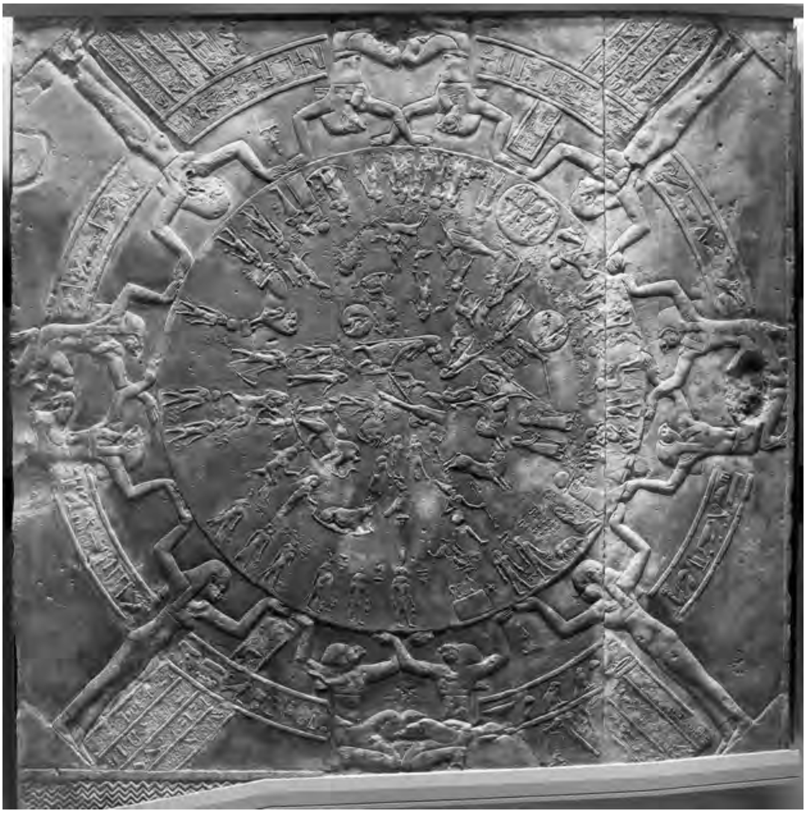

Figure 2.2.3 The so-called zodiac of Denderah: a sandstone slab from the temple of Hathor with a bas-relief representing a map of the sky. Brought to Paris in 1821 and now in the Louvre

major players in the foundation of other (European) traditions as well. Their presence on such a large scale instigated the need to understand them in relation to one another (chronologically) and towards other cultures (geographically) – like we saw happening with the mass availability of *china* and its consequences for Europe's self-definition in the context of world history. The building of museums is intimately linked to these new questions that now emerge about one's own position in the world (Schnapp *et al.* 2013). And in those museums, like the Musée Charles X in Paris, the Aegyptiaca often literally dictated their own surroundings. All this had major implications for Paris, France, Europe, and Egypt itself; the conceptual change from 'Egypt' as part of European cultural memory towards 'Egypt' as a true science called Egyptology is only one of them (Assmann 1997, 2009). As with the capture of the *San Jago* in the seventeenth century and European consumerism of *china* in the eighteenth century, those major effects were often brought about and made to work by objects and their impact on people and society.

Aegyptiaca throughout world history: a *longue-durée* sketch

The agency of Aegyptiaca was strong and pervasive in many more contexts than north-east Africa in Antiquity or Napoleonic Europe alone. From their canonisation in the Old Kingdom (from *c.*2686–2181 BCE) onwards, Aegyptiaca would play a major role in world history. At first only along the Nile itself – dominating the image of Egypt until the present day – but through processes of increasing connectivity, Aegyptiaca would soon go global. In the mid-second millennium BCE, for instance, not only did the kingdom of Kerma depend on Aegyptiaca in the construction of its self-image (see above), but so did the elites of the Mediterranean, Levantine, and Eurasian Bronze Age, with their 'international style' prominently displaying Egyptian (stylistic) elements (Feldman 2006). And, wherever Aegyptiaca spread through the linking or integration of networks, they had an impact; it seems that only very few contexts were immune to the agency of Aegyptiaca.

We can reconstruct these processes rather well for various 'punctuations of connectivity' (Knappett this volume; Versluys 2015a) distinguishable in western Eurasia and the Mediterranean in the first millennium BCE. During the Bronze Age it concerned 'networks of exchange', in which Aegyptiaca played an important role. In their new contexts, Aegyptiaca often changed local practices (Kelder 2009). During the Iron Age, these connections seem to develop into what Knappett and Nikolakopoulou (2005) have called 'networks of affiliation'. Their term is intended to indicate that the ties that were originally established by objects had intensified and developed through both more objects and more people. This resulted in pronounced social effects through the significant changes in the frequency, strength, content, and directionality of the ties making up the network (Knappett this volume). The overview provided by the recent exhibition *Assyria to Iberia at the dawn of the Classical Age* (Aruz *et al.* 2015) shows at a glance how Aegyptiaca were at work as the network's most frequently used global commodity everywhere in Iron Age western Eurasia and the Mediterranean. This was no less true for north-eastern Africa during that period, as has been discussed above. It is against this background that, for instance, the profound civilising process that Egypt would have on the self-fashioning of Greece in the fifth century BCE becomes only logical. As the network's leading global cultural commodity, Egypt mattered as no other cultural form or concept did. Therefore, it was with good reason that Herodotus devoted a separate book to Egypt alone in his world history. Similar to early modern Europe using China and *china* for its self-definition, the Iron Age Mediterranean used Egypt and Aegyptiaca. This would change in the second part of the first millennium BCE, when, especially after Alexander the Great, Greece and things Greek would develop into one of the major *exempla*. Egyptianisms were now often replaced by Hellenisms, which was also related to changes in the frequency, strength, content, and directionality of the ties within the network that we call the Hellenistic world. But although Hellenisms had now become fierce competitors for Egyptianisms, the agency of the latter continued unabated. This is well illustrated by another specific punctuation of connectivity: the Roman world. Hellenism mattered greatly to the Romans, and through the Roman Empire things Greek and Greek-looking spread from present-day Scotland to Afghanistan. But Egypt came a close second after Greece in terms of inspiration and aspirations, as is testified by the many *Aegyptiaca Romana* (Versluys 2002; Vout 2006; Davies 2011).

During Late Antiquity and the Middle Ages, so it seems, there were fewer things Egyptian around (Burnett 2003). The fourth-century CE Hylas panel from the basilica of Iunius Bassus in Rome, composed from an *opus sectile* of coloured marbles, glass paste, and mother of pearl, which ingeniously mixes Egyptiana with Hellenica is a rare late Antique specimen (Figure 2.2.4). Overviews of Roman Aegyptiaca usually jump to sphinxes decorating medieval cloister gardens immediately after that example. From an archaeological perspective, this period remains underexplored. Recent research has made clear that the eastern, Islamic part of the spectrum needs much more attention as well (Van Bladel 2009). In intellectual debates on philosophy and religion in the West, Egypt continued to play an important role. Ebeling (2014) has distinguished

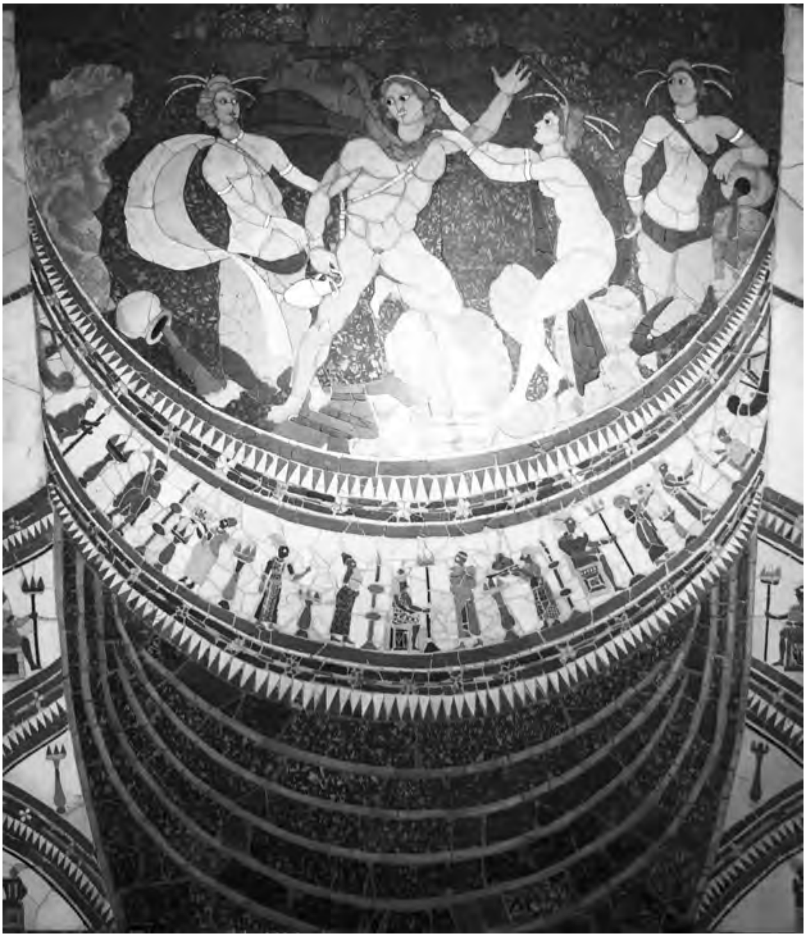

Figure 2.2.4 The so-called Hylas panel from the *basilica* of Iunius Bassus in Rome, fourth century CE, currently at Palazzo Massimo, Rome. Note the Egyptian figures on the border of the mantle

two strands of tradition here. One came from Greco-Roman Antiquity and had a largely positive image of Egypt as a cradle of wisdom and civilisation. The other tradition came from Jewish culture and was rather negatively coloured through the Exodus story in the Jewish bible, where Egypt serves as a kind of negative self-definition for Jewish culture and religion. Both forms of cultural semantics continue to play a role until the present day.

Egypt moved centre stage again during the European Renaissance (Curran 2007). During this period of rebirth, objects often played a crucial role in getting things going. This started with the discovery of a manuscript on the island of Andros in 1422, which became very popular among later fifteenth-century humanist historians: Horapollo's *Hieroglyphica*. Around the same period, the sculpted supports in the form of an Egyptian Antinous from the Villa Hadriana were discovered. Renaissance debates on Egypt often focused on hieroglyphs and, through them, on questions regarding the nature of Egyptian civilisation in terms of antiquity, religion, and magic. These debates mainly took place in Italy. One of the reasons for that, I propose, is that it was in Rome that, especially from the sixteenth century onwards, the largest amount of Aegyptiaca was available – the country of the Nile itself still being rather inaccessible. From this moment onwards, cultural semantics seem to explode, with both the Hebrew tradition and the Classical, Greco-Roman tradition playing an important role. The seventeenth-century attention given to the figure of Joseph (Lang 2010) is an example of the former; the eighteenth-century idea that Egypt equates with mysteries (Assmann and Ebeling 2011), an example of the latter. Aegyptiaca constantly play an important role with this, especially because, unlike during the Renaissance, in the early modern period no new literary source material, such as the *Hieroglyphica* or the *Corpus Hermeticum*, became available.

It has already been briefly illustrated above that Egypt helped shape nineteenth-century France, and that objects were central to those processes. In England, very similar developments are visible (Gange 2013). Acquiring Aegyptiaca mattered immensely to these and other nineteenth-century nation-states, as is testified by the collection building of the Louvre and the British Museum. The inundation of European capitals with Aegyptiaca had a profound influence on their self-fashioning, also in practical terms. For Paris and France more widely, some examples have been given above (Humbert 1989 provides an overview). For London and Great Britain, one could think of the construction of the Egyptian Hall in London in 1812, the Egyptian Court in Crystal Palace from 1854, and the immense public interest, in 1862 in London, for an exhibition showing newly excavated Pharaonic jewellery, culminating in the erection of *Cleopatra's Needle* in 1877 (Gange 2013). One could even see all these objects and the human–thing entanglements they instigated as playing a part, although rather more indirectly, in the English decision to 'occupy' Egypt in 1882. Be that as it may, the twentieth-century *Tutankhamun* exhibitions in Paris (1967) and London (1972) were able to mobilise people in a way few other exhibitions have been able to do (Colla 2007). The agency of these Aegyptiaca is even so strong that, still in 2012–2015, people all over the world were lining up for a travelling exhibition entitled *Tutankhamun, his tomb and treasures*, showing replicas.

Aegyptiaca and material agency: a case study

The necessarily brief overview above has indicated that Aegyptiaca were present in many contexts of world history, and that they were often important to 'putting things in motion'. To investigate how Aegyptiaca are able to determine their context and local *habitus* in this way, I now focus on one particular context, Augustan Rome, to try to better understand the human–thing entanglement of an Egyptian obelisk and a Roman emperor (Augustus).

In 10 BCE, Emperor Augustus inaugurated an obelisk from Pharaonic Heliopolis on the *spina* of the Circus Maximus in Rome (Figure 2.2.5). At that time, the obelisk was about 1,250 years old and it carried inscriptions from both pharaohs Sethi I and Ramses II. Augustus had an inscription added to the base declaring that he dedicated this obelisk to the Sun, now that Egypt was brought under dominance of Rome. As such, Augustus made a lot of meaning with and through this obelisk. He celebrated his newly founded Empire and created a lasting memory for his victory over Mark Antony and Cleopatra, but he also used an Egyptian religious symbol to serve in and innovate an appropriate Roman context. Not only was the *spina* perceived as a microcosmos – with race chariots circling around the sun as planets – but also the obelisk, as a symbol of the sun, clearly referred to Augustus' tutelary deity Apollo. Thus Augustus was transferring Egypt to the banks of the Tiber. Rome inscribed itself in the deep historical time of the East and consequently looked as a legitimate successor to all the older and important cultures that came before Roman civilisation. It is therefore understandable that Augustus included another obelisk (the so-called *Solare*) in his newly created centre of Rome on the Campus Martius. There the obelisk probably served as a sundial, also in order to underline its associations

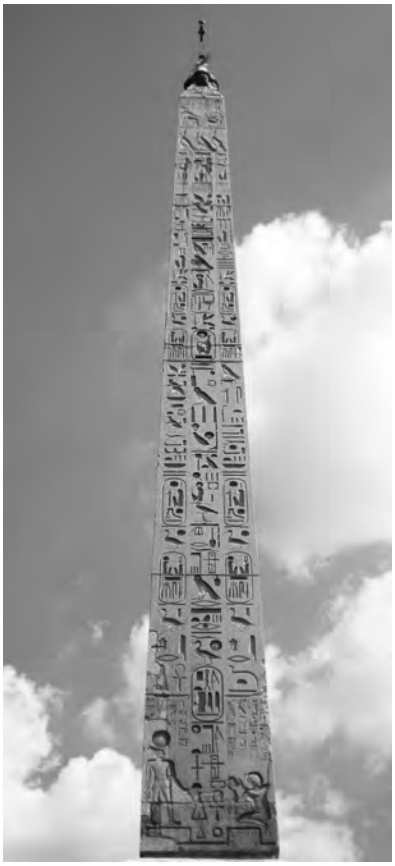

Figure 2.2.5 Obelisk from Heliopolis, placed in the *Circus* by Augustus and re-erected again on Piazza del Popolo, its current location, in 1589 by Sixtus V. Photo by Marike van Aerde

with time and historical memory (for interpretations of these obelisks and their erection by Augustus see Swetnam-Burland 2010; Davies 2011; Versluys 2015b; Van Aerde 2015).

But where then is the agency of the obelisk in its entanglement with Augustus? How, as an object, did it get things going? Viewer responses would be good source material to investigate those questions from a short-term, contextual perspective; but unfortunately we lack direct viewer responses from the period itself. There are, however, Roman authors from later periods that write about obelisks more generally and probably do reflect viewer responses (Swetnam-Burland 2010). Such sources can help us answering questions like: how did the very distinct stylistic and material properties of the obelisk affect Roman viewers? What did its material agency look like in comparison to other monuments and objects in the Roman cityscape? And what were the results of its performance created by Augustus for the city of Rome?

A starting point for answering these questions is the observation that the object-form 'obelisk' soon becomes popular in wider circles; at least, so it seems, among the elites. We see obelisks now being depicted in cameos and luxury tableware; and there are even (literal) copies made, probably to be displayed in *horti* (Van Aerde 2015: 222–60). As far as we can tell, the obelisks in these cases refer to the Augustan performance, and as such the obelisk would steadily develop into one of the main symbols of the Roman imperial dynasty. Through its history, however, the obelisk did much more than signal 'Augustan Empire' alone. The material and stylistic properties of obelisks also had the cultural memory of Egypt as part of their agency; and therefore they were able to signal ideas about Egypt as 'old', 'religious', 'wise', and 'exotic'. This becomes clear from both literary accounts and performances of obelisks in other contexts beyond the Augustan period. In sanctuaries for Isis (and related cults) from the Flavian period (69–96 CE), for instance, we see both aspects of the material agency of obelisks (their dynastic character on the one hand and their 'Egyptian' characteristics on the other) coming together. The Flavian emperors made obelisks part of sanctuaries, like the Iseum Campense in Rome or the sanctuary in Beneventum, where they helped create a strong religious experience. This was an important asset of the Roman cults of the Egyptian gods. At the same time, we find obelisks mainly in temples that were strongly related to the imperial house and much less so in ordinary cult places. In terms of design and stylistic properties, the obelisk was clearly recognisable and stood out. As monoliths, obelisks added significantly to the developing Roman taste for monumentality as an expression of power (Davies 2011). But also their material properties mattered: an inscription on Domitian's obelisk from Rome mentions that it was made from 'real granite' (Versluys 2015b: 145).

The material agency of the Augustan Circus Maximus obelisk becomes even clearer, perhaps, when another moment of performance from its cultural biography – its re-erection by Sixtus V on Piazza del Popolo, its current position, in 1589 – is taken into account (Curran *et al.* 2009). Sixtus clearly did this to present himself as a new emperor, and with it, Renaissance Rome as the new imperial Rome. As soon as the obelisk was standing, however, it triggered all kinds of other responses that revolved around another part of its cultural semantics: the cultural memory of 'Egypt' (Curran *et al.* 2009, chapter 6). As such, the obelisk now became a symbol of 'Egypt' again, and played an important role in constituting the cultural climate of Renaissance Europe. In terms of cultural innovation, therefore, we must conclude that the obelisk became one of the constituents of both Augustan Rome and Renaissance Italy. And it is through this phase in their cultural biography, I suggest, that obelisks can now also be found in Paris, London, and New York: otherwise they might well have 'died out' in Egypt itself. Obelisks thus seem to have generated agency through the specific power of their combined stylistic and material characteristics; constituting, always in combination with human agency, their own network.

Beyond context: accounting for the *longue-durée*

That the use, meaning, and agency of objects change over time and that we can document those changes in biographical terms is well known (Hoskins 2006). But the question of *how* we can explain the different lifespans in relation to one another is much less researched. This might be due to the fact that, for many scholars, 'context' is key to all archaeological interpretation (Papaconstantinou 2006). In that view an object can, in principle, mean anything to anyone, and central to its understanding should therefore be its contextual use (see Hahn and Weiss 2013 for examples). This is very much true for things Egyptian as well: outside Egypt, but also on the Nile itself, Egyptian objects are often not what they were meant to be originally at all (Versluys 2010). At the same time, however, there are clearly limits to the manipulation of objects by people: taking material agency seriously implies this from the start. This seems to apply to Aegyptiaca as well, as we have seen above. On the one hand, therefore, the category Aegyptiaca as such does not seem to exist: Egyptian (-looking) objects can mean anything to anyone with contextual understanding being the key to their interpretation. On the other hand, however, things Egyptian often seem to affect people in rather similar ways over long time spans and large geographical distances. For many contexts, Egypt seems to be something of a 'haunting tradition' (Versluys 2015b). Therefore, there is a case to be made for what one could call 'the value of de-contextualised objects'. This critical tension surrounding the notion of context as used in archaeology is expressed well in Culler's (1997: 67) observation that 'meaning is context-bound, but context is boundless'. If context is boundless – and I would agree that it often is through processes of globalization (see Appadurai (1996: 48) on what he calls 'the global ethnoscape') – objects have a large role to play in determining and formulating contexts: this is also entanglement. Context is therefore not alone in determining the meaning and agency of an object; its inherent 'de-contextualised' value has a role to play as well (see Van Eck *et al.* 2015).

Can we define an inherent, de-contextualized value of Aegyptiaca, then? When we look at the 'cultural biography of Egypt and Aegyptiaca', summarised above, we may try to define its core on the basis of what Aegyptiaca did in those many historical instances. Of course, Aegyptiaca did many different things in many different contexts. But can we, prudently, try to come to some kind of definition with regard to their material agency throughout global history?

In the second half of the first millennium BCE, the concept of Egypt had as its main traits:

> (1) a specific, Pharaonic form of state formation; (2) a differentiated writing culture; (3) a so-called double religion (*religio duplex*) that combined an exotic polytheism with an esoteric monotheism; and (4) an obsession with death and the afterlife (Assmann 1996, 1997).

We see all these traits developing throughout later historical periods, and they continue to form the core of the definition of the concept of Egypt. We could summarise this core with four key words: pharaohs (state formation), hieroglyphs (writing culture), mysteries (*religio duplex*), and mummies (death and the afterlife). In some way or other, Egypt apparently was always about one of these. But how did that concept, so to speak, communicate its characteristics to the world? It did so by being part of the (intellectual) repertoire and processes of cultural formation. This is how 'Egypt' haunted Europe (Versluys 2015b); and this is what Jan Assmann (1997) calls Egypt's *mnemohistory*. But it certainly communicated also, as this chapter has shown, through objects with distinct materials and styles. A definition of Egyptian material culture would, probably, consist at least of pyramids, sphinxes, obelisks, statues, *stelae*, and sarcophagi. In their specific form or by their specific materiality, these all refer to the four key words of the concept: pharaohs, hieroglyphs, mysteries, and mummies. Egyptian-style material culture, therefore, was loaded with connotations, so it seems, because it was able to make concepts of Egypt tangible. Through the strong connections with the concepts of Egypt that it could capitalise upon, Egyptian material culture was thus a very special category of material culture. Its characteristics underline this: in terms of both style (rigid and compact forms) and material (hard and colourful stone) Egypt stands out. Moreover, concept and materiality were able to enforce one another.

It is as such that we can talk about the de-contextualised value of Aegyptiaca. They could be manipulated by human actors in a given (historical) context, but only to a certain extent, because they brought with them material agency of their own. With regard to antiquarianism in the Baroque, Ingrid Rowland (2010, 48, my emphasis) writes about Aegyptiaca and their impact that:

> no scholarly attack could possibly have dispelled the aura of wisdom and mystery that surrounded the Egyptians and Etruscans, not when their artefacts came forth from the earth inscribed in strange, incomprehensible scripts, carved, molded and cast in shapes of odd, compelling beauty.

This observation very well illustrates the agency of Aegyptiaca and shows how this agency is both related to the *mnemohistory* of Egypt and functioned separately.

How to explain this descent with modification within the cultural sphere? This chapter has suggested that objects and their agency should be central to finding an answer to the question of why, throughout history, the 'Egyptian style' is retaken time and again. The continuing renaissances of Egypt are globalising human–thing entanglements. Objects survive usually much longer than people, and are therefore much more important in transposing cultural memory and shared practices. Taking such a perspective on board has all kinds of interesting implications. One of the things it suggests is that we can try to study Aegyptiaca in relation to one another by means of vertical transmission, which functions, so it seems, like descent with modification as it is explored in phylogenetic studies (Mace *et al.* 2005). The *longue durée* sketch above might indeed suggest such a parallel.

We might also think about meme-theory and argue that, with their distinct stylistic and material properties, Aegyptiaca apparently were better equipped for self-reproduction than were other styles and materials. Style and materiality, then, function as what memetics would call the extended phenotypes of the meme Aegyptiaca. In her introduction to memetics, Susan Blackmore explains how 'successful memes are the ones that get copied and spread, while unsuccessful ones do not' (1999: 7). And, as we have seen, Aegyptiaca are very good at getting replicated. But obviously, establishing a relation between the idea of vertical transmission and phylogenetics or memetics needs much more background and in-depth research. The objective of this chapter was not to provide that, but rather to show that Aegyptiaca are a worthwhile category to be analysed along those lines (see Shennan 2002).

Let us briefly return to Africa. African renaissances are often substantiated by claims about the glories of ancient Egypt (see O'Conner and Reid 2003). Pixley Seme, a Black public intellectual and the founder of the African National Congress, did so in one of the first of these public claims in 1905, as did Cheikh Anta Diop in 1991 (for these examples and the following quote see Orrells *et al.* 2011: 5–8), when he wrote:

> The return to Egypt in all domains is the necessary condition for reconciling African civilizations with history, in order to be able to construct a body of modern human sciences, in order to renovate African culture. Far from being a revelling in the past, a look toward the Egypt of Antiquity is the best way to conceive and build our cultural future. In reconceived and renewed African culture, Egypt will play the same role that Greco-Roman Antiquity plays in western culture.

Egypt is evoked here as a cultural force that is able to instigate innovation; to bring things to life again. I am unaware of the material-cultural aspects of this twentieth-century African leitmotiv; were Aegyptiaca needed to back up this claim?

Although understandable against the background of African (socio-political) history, the theme of Egypt as instigator has a much wider resonance, as has become clear. Many examples throughout this chapter have shown how Egypt and Aegyptiaca function as catalysts that 'get things going'. In this sense, it seems, Egypt was always perceived as a culture that could add to the status quo. Being Self and Other at the same time, it was often regarded as having the potential to act and transform. Objects and their material agency are crucial to understanding both the functioning of those processes and their globalisation.

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period 2010–2015 under my supervision and could not have been written without the input of the four PhDs attached to the project: Marike van Aerde, Maaike Leemreize, Eva M. Mol, and Sander Müskens. Besides presenting some of the results, this essay also aims at providing perspectives for further research. The present chapter does so by focusing on the material agency of Egypt in terms of vertical transmission in general terms. Versluys 2015b is more focused and studies Egypt as a haunting tradition in the Roman world from the perspective of material culture. These two articles are supposed to illuminate each other.

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2.3

Globalization

Contact between West Africa, North Africa and Europe during the European medieval period

Scott MacEachern

Introduction

Any consideration of processes of globalization in the medieval period between West Africa on the one hand and North Africa and Europe on the other, must consider two sets of issues. The first of these is: what are the actual evidences that we have for economic, social and/or political contacts throughout this region during this period; the second is: does the nature of any such ancient contacts across seas, deserts and continental boundaries constitute 'globalization'? The first question is straightforward and will be discussed below although, as we will see, finding data for an answer can be difficult. The second is less easy to answer. There is (often somewhat fragmentary) evidence for long-range cultural connections between West Africa and the Mediterranean world through the medieval period, and indeed before that – but can we say that such evidence for connections implies processes of globalization? This depends upon our definition of globalization, and such definitions are – to say the least – various. John Tomlinson's (1999: 2) definition of globalization as 'complex connectivity . . . the rapidly developing and ever-densening network of interconnections and interdependences that characterize modern social life' is not applicable to the evidence for long-distance, sporadic, tenuous and culturally 'thin' networks of connection that are characteristic of much of the area and time period covered in this chapter. For most of this period and over most of this area, the modes of interchange involved might more closely approximate the 'small-world' networks described by Sindbaek (2007) in early medieval Northern Europe, mediated by small numbers of key individuals or locations with many long-distance ties and vulnerable to disruption, rather than Tomlinson's dense and complex networks of globalizing interchange. At the same time, and as Sindbaek argues, such small-world networks can themselves transform social systems.

Other definitions of globalization in ancient societies exist. Perhaps the most useful to the present case is Jennings' (this volume) application of a specific set of criteria for globalization to prehistoric cases. Using Jennings' criteria, we will have to say that sub-Saharan Africa was *not* involved in a process of globalization with North Africa and Europe through most of the medieval period, although, as we will see, there are complications to the case. Notwithstanding this point, however, any consideration of globalization in this area and period must also involve examining the consequences of contacts between regions, rather than their mere existence or even their magnitude; that is, when and where do we see integrated economic, sociopolitical and/or ideological systems developing, such that developmental processes in particular areas functioned in large part based upon their articulations with other parts of the integrated system? Where do we see people beginning to define themselves as participants in a larger world? Using this approach, Inikori (2007) placed the origins of Africa's long-term engagement with the Atlantic world, and thus of that aspect of Africa's globalization, early in the sixteenth century CE, when African slaves began to become important in New World economies. But what of the lands around the Mediterranean and the Sahara, and those parts of West Africa that articulate with them, where contact had been more gradual and of longer duration?

Historical assumptions

As we examine globalization processes between West Africa, North Africa and Europe during the European medieval period (between approximately 500 and 1500 CE), we must also take account of the different lenses through which medieval history is viewed in these different areas. For the European and Mediterranean cases, this historiography is well known, with early medieval societies understood by looking backward to the fall of the Western Roman empire, while later medieval examples look forward with prefigurations of the Renaissance, the discovery of the New World, and modern times (e.g. Cantor 1991). For Western Europe, globalization is frequently thus understood as beginning at a particular historical moment at the end of the medieval period, more or less with the beginning of the Age of Exploration. Nineteenth- and twentieth-century debates about African cultural development were very different, often revolving around the issue of whether developments south of the Sahara were endogenous or not, a relic of racialized perceptions that African societies were not capable of cultural innovation on their own (Mudimbe 1988). In those debates, the European *early* medieval period frequently served as a point of inflection, separating a 'prehistoric' Africa from the engagements with the outside world that would follow, through first Islamic and eventually European contacts.

In contrast to Europe and the Mediterranean Basin, where long-distance connections are widely recognized and incorporated into historical models, West Africa has always been treated as a land apart during this period. Given such disparate understandings of medieval history and cultural development, it is not surprising that little work has been done examining cultural developments between West Africa and the Mediterranean or Europe in a comparative context. Haour's (2007) path-breaking appraisal of the similarities and differences between the Central Sahel and the lands around the North Sea over the period AD 800–1500 stands as the only significant work undertaken in this vein. The present chapter is far more limited in scope: in it, I will consider the modes of contact between West Africa on the one hand, and North Africa and Europe on the other, during this period, with the aim of evaluating how such contacts might fit within models of globalization.

Connections and collapses

The history of interchange between West Africa, North Africa and Europe during the medieval period is one of dynamic environmental and cultural systems, with significant changes in the human experience of those systems over relatively short periods of time. Two geographical barriers, the Mediterranean and the Sahara, dominated the region and imposed systemic similarities on regional interchange: the use of the Arab term *sāhil*, or 'coast', for the southern margins of the Sahara evokes these similarities (Mitchell 2005: 135–72). Both desert and ocean require complex technological and organizational capabilities to fully navigate and exploit these hostile environments, and are subject to dramatic changes in the extent and density of networks when new capabilities are introduced. Thus, the progressive development of skeleton-based construction and carvel planking techniques (Pomey *et al.* 2012) in the early medieval period revolutionized the possibility of seaborne interchange around the Mediterranean, and eventually beyond, as did the introduction of camels to exchange networks across the Sahara (MacDonald and MacDonald 2000). If a relatively well-defined Age of Exploration marks the beginnings of globalization in the Atlantic world (see above), did the introduction of camels and other technologies of trade have the same effect in the Sahara a thousand years earlier?

Both sea and desert would also have required similar kinds of organizational responses: coastal entrepôts where trade goods would be accumulated and trading voyages arranged, waypoints and replenishment areas (whether islands or oases), and guilds of merchants and experts in the technologies of navigating these unforgiving environments. Research on trading entrepôts has been a central element in archaeological investigations across this area and period, in part because of their historical saliency (Hesnard *et al.* 1999; Nixon 2009; Fauvelle-Aymar *et al.* 2014), but often to the neglect of hinterlands where the resources involved in exchange systems may well have originated. The same neglect of rural hinterlands exists in medieval archaeology in northwestern Europe as well (Hamerow 2002: 163); it is hard to evaluate processes of globalization if we know nothing of the cultural responses of the local populations being 'globalized'.

The dynamics of interchange in the lands around the Mediterranean and the Sahara is also reflected in the political trajectories of these regions during the early part of the medieval period (Figure 2.3.1). At 500 CE, both regions were adjusting to the disappearance of states that had

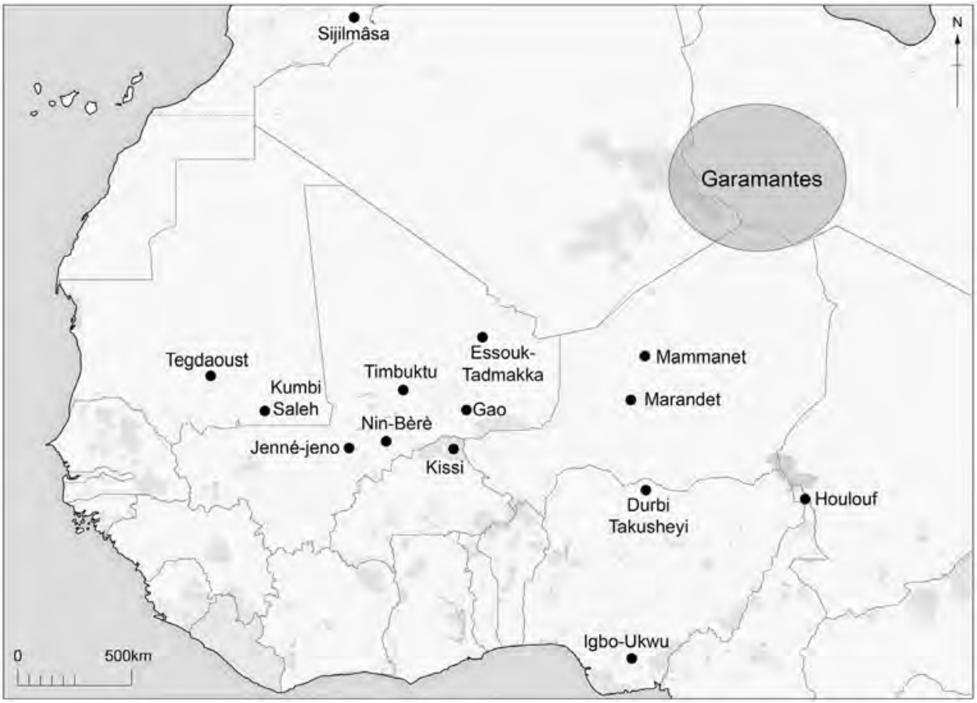

Figure 2.3.1 Map of the Sahara and West/Central Africa, with sites mentioned in the text

played a central role in mediating material, cultural and political flows for centuries: the Western Roman state in its various forms, and the Garamantian state in the Central Sahara. The question of whether Roman rule can be understood as a globalization process is contentious, but there is no doubt that the empire imposed common political and cultural norms, especially at the elite level, over a large part of the region in question. The disappearance of that common framework seems to have been associated with a significant localization of exchange networks and an accompanying decline in systems of long-distance interchange (e.g. Wickham 2005: 693–824). The much smaller Garamantian polity and its engagements with neighbouring communities is far less understood (Liverani 2000; Mattingly 2003; Mattingly 2011; Wilson 2012), as is the cultural influence of Rome on the Garamantians, but there is little reason to doubt that it played an important role in articulating systems of interchange with different societies in and around the Central Sahara between the late first millennium BCE and perhaps 500 CE. The decline of the Garamantian state in the mid-first millennium CE, just centuries after that of the Western Roman empire, does not appear to have led to a corresponding localization of exchange networks in that part of the Sahara, based on the archaeological evidence below. Throughout the wider region, the sociocultural structures of universalizing religions, both Christianity and Islam, played a central role in mediating long-distance contact and exchange, to some degree supplanting the imperial administrative and ideological systems of Roman times (Haour 2007: 104–24).

Pre-Islamic and Islamic contacts: points of orientation

Wilson's (2012) comprehensive survey establishes that significant trade networks existed in and around the Sahara during the early first millennium CE, especially in the Central Sahara with the Garamantian state and articulating with the Roman Mediterranean. Thus, intercultural interchange in the region during the medieval period was not a new development, but rather the continuation of practices that had gone on for some centuries at least, undertaken in a dynamic context of environmental change (Brooks *et al.* 2005), technological innovation and political transformation – first with the collapse of the Garamantian state and the Christian states of North Africa, and then with the coming of Islamic polities. Wilson's work also makes clear that we need a fresh appreciation of exchange systems operating at a number of different scales. Trade goods (including humans) were most frequently moved between series of intermediaries, rather than directly across the desert, and during the Garamantian period at least, demand would have been situated as much in Saharan communities themselves as in populations living on the margins of the desert.

This accords with historical practice (Scheele 2010), and might allow researchers to integrate the study of the more 'charismatic' long-distance trading systems (especially those involving slaves and gold) with consideration of commodities traded at short or medium ranges (salt, alum, grain, meat, carnelian and so on). It also implies that the material contexts of exchange around the Sahara would have involved much more than rare exotics from the other side of the desert, and that we should not necessarily expect to find such exotic items at the end points of even the 'charismatic' trading networks. For the Garamantian period, for example, the finds of Roman material in the Sahara (Wilson 2012: fig. 1) do not necessarily imply the southern limits of trading networks that may instead have involved other products, and we should perhaps not make too much of the lack of material evidence for North African contacts in some parts of West Africa during the medieval period.

In addition, processes of contact and cultural interchange do not have to have involved trade directly: they might have involved the innovations that made trade possible (e.g. horses and camels in both southern Saharan and sub-Saharan societies, coinage and market systems), other kinds of technical and cultural innovations not directly involving trade (*foggara* or *shaduf* irrigation systems), or even entirely non-cultural processes like disease/pandemics (Gérard Chouin, personal communication). For the period in question, the long-standing issue of North African Islamic influence in medieval West African urbanism and state formation (Levtzion and Hopkins 1981; McIntosh and McIntosh 1984; Insoll 1996) constitutes probably the most important and most controversial example of contact processes, since it was assumed through much of the twentieth century that Islamic contact brought states and sociopolitical hierarchy to the region. Archaeological research, most famously at Jenné-jeno (McIntosh and McIntosh 1980; McIntosh 1995), demonstrated that urbanism and political complexity in West Africa significantly pre-date Islam. If the assumption was made that pre-Islamic trans-Saharan contact was extremely rare or non-existent, then we could also assume that the cultural origins of urban sites like Jenné-jeno were endogenous. Renewed appreciation for the importance and reach of the Garamantian state, and for Saharan trade in the Roman period more generally, complicates this line of reasoning, since cultural influences could have reached West Africa in earlier periods. To a significant degree, such a debate reflects the historical assumptions about Africa noted in the introduction to this section: if we believe that Africans have the same cultural potentials as populations in other parts of the world, the question of pre-Islamic contacts becomes an historical issue, not a 'racial' one, and, correspondingly, of far less ideological importance.

Early evidence of contact

Although two non-African glass beads are known from late first-millennium BCE contexts in the Nin-Bèrè 3 and Jenné-jeno sites, the first substantial evidence for trans-Saharan contacts in West Africa comes from the Kissi site complex in northeastern Burkina Faso (Fenn *et al.* 2010; Magnavita 2015), and dates to the early/mid-first millennium CE. The site thus straddles the chronological disjunction between late Roman/Garamantian and medieval times. In Grave 2 at the Kissi 14C cemetery, brass objects, as well as glass beads and woollen textiles (respectively, the most common artefact class originating outside West Africa during the period, and a material historically significant in trans-Saharan trade but almost never preserved) date from the early centuries CE. Carnelian beads probably indicate trade with the Central Sahara at least, although some may have non-African origins (Insoll *et al.* 2004). These artefact classes continue to be found in later graves at Kissi, along with cowrie shells, daggers, and swords all probably of non-West African provenance. It is dangerous to place much weight on unique examples and we must remember that exotic artefacts may be conserved over long periods, but the Kissi site complex does not display any evident interruption in the availability of such artefacts across the period of the Garamantian collapse, implying relatively robust (or at least resilient) exchange networks through the first millennium CE. Similar objects are found by the sixth–ninth centuries CE in the northern Sahelian site of Marandet in Niger, which appears to have served as both a provisioning site for traders and a copper-/brass-working site, again presumably in the service of trade with populations to the south. The existence at Marandet of pottery originating in the Lake Chad Basin (Sonja Magnavita, personal communication), 800 km to the southeast, is a remarkable testimony to the long-distance movement of a relatively fragile artefact class at this time, as well as a reminder of the role that medium-range, sub-Saharan exchange networks must have played within Saharan trading systems more generally.

Glass and carnelian beads seem to have been rare and valuable items in West African sites from their first appearance at the end of the first millennium BC, but became more common by the late first millennium CE on sites from the Sahel to the forests of southern Nigeria. They sometimes occur in very substantial quantities – 150,000 at the site of Igbo Ukwu, for example, the majority of Middle Eastern provenance. Their presence implies the existence of long-distance exchange systems moving these exotic artefacts across particular environmental and cultural frontiers, and their great diversity in points of origin – from North Africa, to the Middle East, to Iran and South Asia, to possibly as far away as China – demonstrates the complexity of those networks. It is likely, however, that the West African segments of these transcontinental networks were not yet highly elaborated in the early first millennium CE. Rather, they would have been 'small-world' networks à la Sindbaek (2007), reliant on relatively small numbers of well-connected individuals and hubs, with materials available only sporadically and unpredictably over the short term, even if consistently obtainable over the longer term (involving perhaps availability on a timescale of decades).

The Kissi graves appear to demonstrate a very substantial investment in exotic goods for elite display, with the variety and elaboration of those artefacts increasing through the first millennium CE, though the overall cultural context of the site complex appears to be entirely indigenous, displaying parallels with other sites in the region. This was, then, not globalization, but rather the deployment of rare and exotic materials in the quest for status and prestige (Helms, 1988) by local elites and according to local definitions. Such usage seems to have been characteristic of much of West Africa during the early medieval period. In the southern Lake Chad Basin, Saharan (carnelian beads) and non-African (glass beads, cowries) trade goods appear in substantial numbers after 700 CE (MacEachern in review) – as at Kissi – in cultural contexts that appear entirely indigenous. The rather later appearance of exotic objects south of Lake Chad may be related to the lack of gold in the region.

It is during the latter part of the Kissi sequence, between about 750–950 CE, that we see the first substantial evidence of occupation in the entrepôts that historically would play a linchpin role in Saharan trading systems over much of the next millennium. These include Sijilmâsa in southeastern Morocco (Fauvelle-Aymar *et al.* 2014) and Essouk-Tadmakka in Mali, the latter with evidence for the minting of (probably blank) gold coins during this period (Nixon 2009). According to contemporary texts, both trading entrepôts were established and occupied by Muslims. Graves following Islamic practice have been located at Mammanet in the Aïr region of the Sahara, well west of the Central Saharan routes used earlier by the Garamantians, and dating to the first century or two after the Islamic conquest of North Africa. Such practices coexist with non-Islamic burial norms for some centuries afterward (Haour 2014), but they indicate that some nomadic Saharan populations had converted very early in the history of the Islamic conquest. Haour points out the potentially very significant role of networks of culturally and religiously based confidence that may have facilitated the early success of Islamic merchants and clerics in Saharan trade. Beyond these trading and burial sites, the initial phases of contacts between Islamic traders and clerics and West African communities, before the end of the first millennium CE, remain obscure. The archaeological evidence strongly suggests that the coming of Islam would not have involved a change in state of the trading system, but rather a continuation of systems already in place, probably accelerated over time by a variety of factors: ideological trust; increased availability of camels; and possibly the beginnings of, or a substantial increase in, a Guinean trade in gold to Islamic North Africa (Wilson 2012: 436).

The later medieval period across the Sahara

Archaeological research on trans-Saharan contact and exchange in the late medieval period, between approximately 1000 and 1500 CE, has focused on evidence for trans-Saharan trade and influences in West Africa from the Islamic world: there has been essentially no consideration of African influences moving in the opposite direction. What do we know of the consequences for

North Africa and Europe of contact with West Africa? In human and material terms, the chief effects here would have been the goods exported, and slaves and gold in particular. Austen (1992: 222) notes the difficulty in estimating numbers of slaves exported from West Africa during the medieval period: documentation is so sparse that we cannot evaluate the impact of the trade on either target populations south of the Sahara or the Islamic communities of the Mediterranean Basin where the vast majority of such slaves were sold. Reference to slaves and slave-taking is ubiquitous in the Islamic sources from their very beginning during the initial Islamic incursions into the Sahara (Levtzion and Hopkins 1981: 12), with historical continuity from Garamantian times (Fentress 2011), and continues through the end of the medieval period (Lange 1987). The most promising avenue for research on the medieval trans-Saharan slave trade and its impacts on Mediterranean societies may lie with genetic analyses (e.g. Cerezo *et al.* 2012), especially given the continually improving chronological resolution of genetic techniques. Enslaved West Africans would certainly also have brought their own beliefs and behaviours across the deserts, and these very likely persisted in their lives in the Mediterranean world, as they continued to do in the nineteenth and twentieth centuries (Hunwick 2003).

The role of West African gold in the medieval Islamic world and Europe is well known, from the late eighth century CE when Muḥammad ibn Ibrāhīm al-Fazārī called Ghana 'the land of gold', and it was considered as a region extraordinarily rich in gold by Christian Europeans as well – as with the depiction of Mansa Musa of Mali seated on his throne and holding a nugget of gold in the *Catalan Atlas* of 1375–1380 CE (Figure 2.3.2). The availability of that metal played a great part in reviving the economic fortunes of Islamic North Africa and Al-Andalus from the tenth century onward (Spufford 1988: 165). Accessing West African gold became increasingly central to Christian European economies from the thirteenth century onward (Blanchard 2005: 1112–1381), such that the search for gold was the chief impetus for European exploration of West Africa from the fifteenth century onward, both through the Sahara and by ship along the Atlantic coast. One response was the export of mercury, particularly from Spanish mines, across the Sahara to the goldfields of West Africa, there to be used to increase the efficiency of gold extraction techniques. Sub-Saharan ivory may have played a supplementary role as an important European luxury good after the mid-thirteenth century (Guérin 2010). We may ask, however, whether the trade in such goods constitutes globalization, given its origins in parts of West Africa that were non-Islamic during the Middle Ages and the complex sets of middlemen that moved gold and ivory from source to destination.

Political and cultural interchange across the Sahara expanded significantly during and after the tenth century CE, as sites like Sijilmâsa and Essouk-Tadmakka grew still further and as entrepôts and political centres like Tegdaoust, Gao and Kumbi Saleh (Robert-Chaleix 1989; Insoll 1996; Berthier 1997) became points for trade and wider contact in the Sahara and to its south. This is marked by much substantial evidence for contacts from beyond the subcontinent at these sites, including compelling markers of literacy and elite status (e.g. Bedaux *et al.* 2003; Farias 2003), as well as the spread of such evidence for elite exchange and contacts to other areas of the Sahelian and Sudanian zones. Trade objects like glass beads, brass and cowries are found in larger numbers and on a much wider variety of West African sites between the Atlantic and Lake Chad after the tenth century CE. While it is likely that some of the glass beads were locally produced in the later medieval period, there is strong evidence that trade goods from beyond the Sahara were becoming more widely available to populations south of the desert over this period. These items are found both in non-Islamic contexts (e.g. MacEachern *et al.* 2012; Mayor *et al.* 2014), as well as in non-elite contexts in communities that probably were already Muslim (e.g. McIntosh 1995; MacDonald *et al.* 2011), perhaps indicating more widespread availability and more polyvalent meanings for these artefact classes during the late medieval

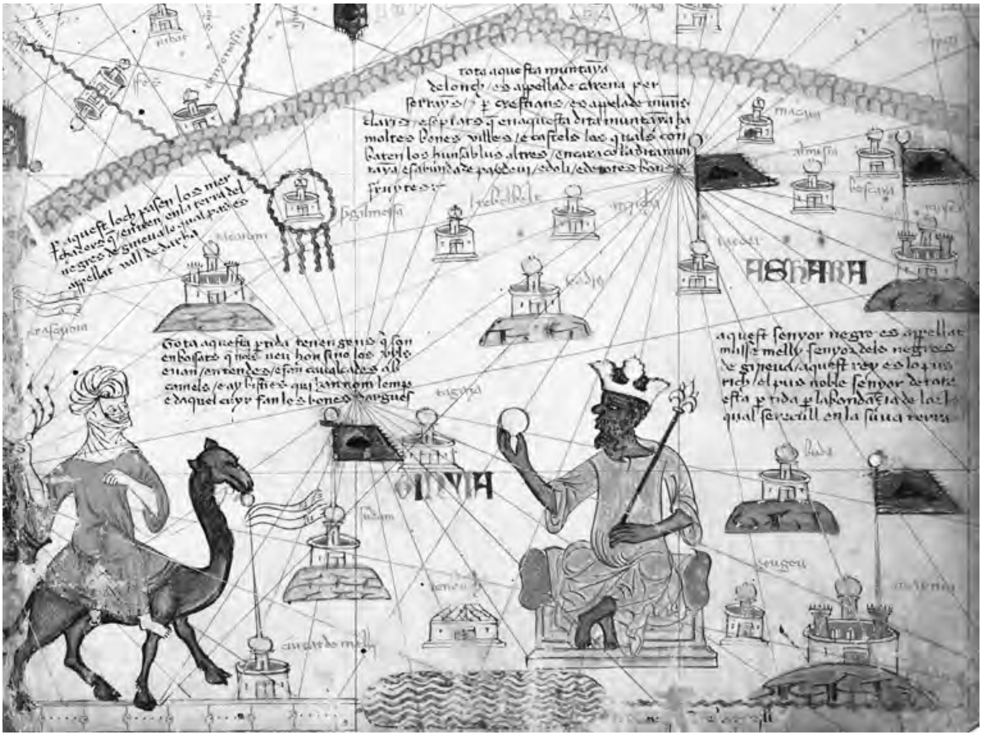

Figure 2.3.2 Mansa Musa in the *Catalan Atlas.* (Bibliothèque nationale de France)

period than was the case in earlier times. The modalities through which such exotic goods were spread across the continent are not well understood archaeologically, although the extension of trading networks by Muslim converts, such as those Mande-speaking groups known by the fifteenth century as Dyula (Perinbam 1980), certainly contributed to that process. The systems of trust and cooperation that Haour (2014) describes in the Sahara would have been just as useful in the forest zones of West Africa as well.

The later medieval period, from approximately the tenth until the fifteenth century CE, seems to be the period in which Islam began to have a substantial impact on sub-Saharan societies, through widespread trade and through elite conversion – both of which provided a new and compelling material and behavioural system through which West African elite groups could communicate and demarcate their status regionally, as well as their connections to a wider Islamic world. This would certainly not, however, have been a simple process. Islam in medieval West Africa would be defined in the encounter with preexisting and sophisticated belief systems organized along very different lines, and probably including both already centralized states like Ghana (Levtzion 1980) and societies with very different balances of heterarchy and hierarchy (McIntosh 1998). The spread of Islam in West Africa is usually understood in elite terms (Levtzion 2000), with accounts of the spread of sects and Islamic brotherhoods and the conversion of kings, but we must remember the extraordinary degree of syncretism between Islam and indigenous beliefs that is not captured in those elite accounts. A number of the medieval Arabic historical sources note that while the rulers of West African states were Muslims, their subjects were not, or that even the rulers were not observant Muslims (Levtzion and Hopkins 1981: 76, 87, 174, 179).

Syncretism between Islam and indigenous belief systems would guide the behaviours of everyone from kings like the Songhai Sonni Ali to slaves in North Africa (Montana 2003).

Insoll (2003: 206–62) proposes a two-stage process of Islamization, while noting the paucity of archaeological data from the late medieval period in Sudanian/Sahelian West Africa. In the first stage, Saharan and North African traders and clerics established a presence in West African urban centres between the tenth and thirteenth centuries CE, in some cases building separate settlements at the capital for the foreigners – a pattern also seen in contemporary northern Europe. This period saw widespread conversion of elite groups to Islam, so that significant levels of enculturation to Islamic norms might have taken place in urban contexts. There is, however, little evidence (in burial practices, for example) for rural conversion during this phase, even in areas theoretically under the direct control of Islamic rulers. During the second phase, after the thirteenth century CE, Islam would have begun to make inroads into rural and non-elite populations, as well as becoming even more significant in centres of trade and learning like Timbuktu (Insoll 1998, 2001). This was, however, a very gradual process, and it is likely that Islam did not spread appreciably in rural areas of even Islamic states in West Africa until the seventeenth or eighteenth centuries.

Stratified non-Muslim polities with wide trading connections continued to exist in proximity to Muslim communities even at the very end of the medieval period, as is indicated for example by the Houlouf cemetery south of Lake Chad (Holl 1994). The extraordinary Durbi Takusheyi burials, found in the Hausa heartland between Katsina and Daura in north-central Nigeria, are particularly worthy of note in this context (Gronenborn *et al.* 2012). The seven tumuli at this site were probably built at various times between the thirteenth and early sixteenth centuries CE, during a period of florescence of developing Hausa elites. The rich grave goods (Figure 2.3.3) recovered from these tumuli, including various copper alloy and gold objects, cowries and glass, and carnelian beads, testify to active participation in exchange networks extending to North Africa and the Near East. It is likely that most of these objects were either procured directly from Saharan sources (e.g. the carnelian beads) or brought into the region along Central Saharan trade networks. However, the cultural configurations of the burials and historical traditions indicate that the Hausa rulers buried at Durbi Takusheyi had not yet converted to Islam.

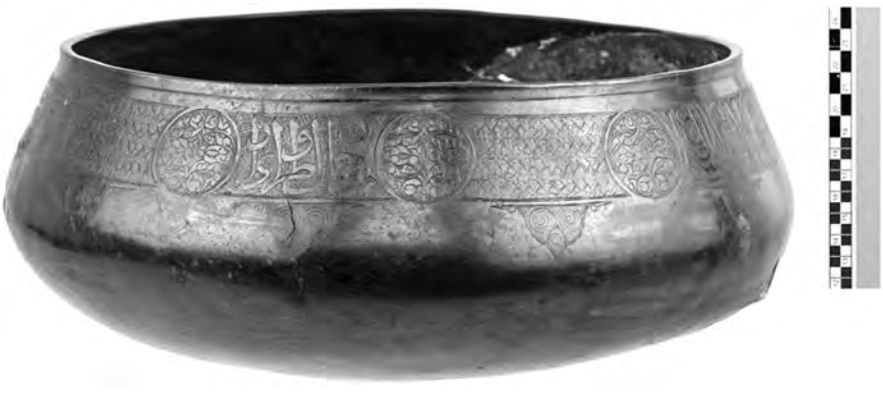

Figure 2.3.3 Metal bowl from Tumulus 7 at the Durbi Takusheyi site, Nigeria, with an inscription in Arabic *tulth* script. (Image: Römisch-Germanisches Zentralmuseum, Mayence/V. Iserhardt.)

Through the medieval period, then, we see trans-Saharan contacts in West Africa playing two related, but rather different, roles. Historical and archaeological data both indicate an important impact on elites and elite behaviour, first through the adoption of new and exotic material markers of status and ultimately through elite conversion to Islam. By the end of the fifteenth century, Muslim rulers in West Africa acted within the ambit of an Islamic cultural world that spread from modern Senegal to Indonesia and China. For commoners in even Islamic states, however, and for the masses of people who lived beyond the borders of those states, the impact of trans-Saharan contacts was far more limited. We can say with some confidence that goods from across the desert played a role in status displays, presumably in part because of their rarity and exoticism. They did so for elite individuals, as at Igbo Ukwu and Durbi Takusheyi, and also with the many ordinary people buried with a few glass beads and cowries in graves across the subcontinent. The cultural associations here were almost certainly not with Islam as a religion, but we have very little information on how such foreign artefacts fit into the great variety of cultural and ideological systems found in West Africa during the medieval period.

West Africa during the European medieval period: globalization or not?

Any discussion of globalization in medieval West Africa is, in a sense, a cultural and chronological trap: temporal periodizations that may be a natural point of inflection for European societies, looking forward toward the Age of Exploration and the beginnings of global expansion, do not necessarily make any sense for West African societies on very different historical trajectories. Indeed, the salient impression that one receives from looking at the archaeological and historical record in West Africa is how poorly it fits into such European historical periodizations. There appears to be quite a steady increase in contacts across the Sahara from the end of the first millennium BCE onward, an increase that on present evidence does not seem to be greatly affected by sociopolitical processes like the fall of the Garamantian state or the coming of Islam. In more recent times, the periods of jihad between the seventeenth and nineteenth centuries CE may mark at least as important an historical transition in West Africa as the arrival of Europeans along the Atlantic coast at the end of the medieval period – marking, perhaps, stages in a process of globalization as significant for Africans as Inikori's opening of the Atlantic world, as Islam was adopted by non-elites in the Sudanian and Sahelian zones. Blanchard (2007) has identified cycles in the importance of African gold in Old World economies from the late medieval period until the eighteenth century, and advances the hypothesis that these were in large part due to environmental cycling in the Sahara and merchant responses to that cycling. It may be equally important to look to environmental and technical changes of this sort in order to understand the course of West Africa's interactions with other parts of the Old World.

So, then, did West Africa become part of a globalized *oikoumene* during the European medieval period? To repeat, our answer to this will depend on our definition of globalization. We may hold that globalization involves regionally integrated economic, sociopolitical and/or ideological systems, such that developmental processes in this part of the world functioned in large part based upon their articulations with other parts of the integrated system. We might look for the time when West Africans begin to define themselves as participants in a larger world, one that extended far beyond the boundaries of their own society. Jennings' (this volume) set of criteria roughly corresponds to these definitions, although at this point we do not have enough data to establish whether his specific criteria held for many areas and time periods in West Africa.

We can evaluate these definitions only in terms of times, places and social classes. On the basis of material culture and architecture, Garamantian elites probably did not think of themselves as part of the Roman world. However, they made use of a sophisticated material vocabulary, much of it originating in Roman North Africa, in order to signal their status, and their economy was integrated into the larger North African Roman economy. If we identify a process of globalization associated with the Roman empire, the Garamantian state was part of it.

No equivalent degree of integration would exist in West Africa as a whole through the European medieval period. Instead, we see a slow and discontinuous adoption of exotic elements of material culture that began in the late first millennium BCE and had penetrated widely throughout West Africa by the end of the medieval period, more than 1500 years later. By then, people in communities in many parts of the Sudanian and Sahelian zones were using glass and carnelian beads, cowries, and brass and bronze objects – as well as textiles and other classes of materials only rarely preserved – in diverse cultural contexts, non-elite as well as elite. There probably existed regional understandings of what these exotic items meant culturally, variably comprehensible and debatable between neighbouring communities. The supply of such exotic objects would have been important in local socioeconomic and status systems, just as West African gold was significant to contemporary Mediterranean and European economies and prestige systems, but in neither case did the connections that supplied these exotic materials underpin such economies or ideological systems, such that these items were essential to their functioning. The great majority of West African communities made use of the possibilities of trading systems, but did not, in any significant sense, participate in a process of globalization. This included members of elites in non-Muslim societies, although it is likely that for many of those people – those ultimately buried at Durbi Takusheyi, for example, or the local rulers participating in Lake Chad Basin slaving systems (MacEachern 2015) – the advantages of conversion to Islam were becoming steadily clearer.

Between approximately 1000–1500 CE, elites in different areas of the Sudanian and Sahelian zones of West Africa were adopting Islamic identities that *did* transcend the subcontinent, becoming members of the *ummat al-Islamiyah*, the community of Muslims that already at that point spread across half the world. This was meaningful in local contexts, as it provided a new language for elite behaviour and the opportunity to buttress rule both ideologically and materially – and in the context of global Islam – as West African Muslim communities became influential far beyond the subcontinent. Those elites, along with elements of the urban populations who shared their capitals and the Muslim traders who linked the goldfields of Guinea with the Saharan trading networks, engaged in networks and processes that we can meaningfully identify as globalized. Increasingly, their self-identities and behaviours were defined by their membership in the *ummah*, and their economies and political systems were integrated with those of other Muslim societies.

However, through the medieval period there is little historical or archaeological evidence that such identification spread widely beyond elite cultural contexts and beyond the towns where rulers and Muslim traders lived. In part, this may be due to the nature of regional trading systems: although short- and medium-range trade involved commodities like salt, grain and meat, necessary for the continuation of local communities, the ‘charismatic’ trans-Saharan trade goods, especially slaves and gold, did not widely engage the hinterlands of Islamic states. Rulers and courts sustained their Islamic identities on the economic basis of trade goods acquired – often violently – beyond their borders (Reyna 1990; MacEachern 2015), and then traded to the Islamic world. They did not necessarily have to have a great deal of interaction with common people to do so, and such interaction as did exist seems to have led to elite syncretism more than to non-elite adoption of globalized mores. It would not be until the jihads of the succeeding centuries that Islam would spread widely in non-elite contexts in West Africa, extending membership in the world of Islam to common and often-marginalized people – at the same time that an equally violent process of incorporation into global economic and political systems was being sparked by contacts with Europeans along the Atlantic coast of West Africa.

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2.4

The Swahili and globalization in the Indian Ocean

Chapurukha M. Kusimba

Introduction

The term globalization is loosely defined as the worldwide movement toward economic, financial, trade, and communications integration. This broader outlook sees the world as an interconnected and interdependent whole. Scholars of globalization today describe the paradox of our contemporary world (e.g. Benyon and Dunkerley 2006). On the one hand, we are witnessing the breaking down of boundaries of time, space, culture, and difference at a pace that is quite dizzying. As mobile technologies stretch and bend personal and collective communication (see Verne this volume), contact becomes possible at nearly every point in time and space, enabling global economic integration, and unprecedented levels of migration and trade. Discourses and social movements increasingly debate human rights and the social contract at a global level.

On the other hand, fragmentation and difference making is counteracting these processes and technologies that integrate and connect us. In fact, new and existing boundaries are being built up that seem stronger than ever. These divisive effects include the creation of greater inequalities of wealth and access; the demand by many ethnic communities for autonomy or national identity; and the resistance to global integration or to ideologies that are believed to be or associated with the West. As Thomas Erikson writes, ‘The fragmented, fleeting social world made possible through the disembedding processes of globalization is counteracted by strong networks of moral commitment, concerns with local power and community integration, and national and subnational identity politics’ (2014: 9).

Asia’s re-emerging global influence, coupled with the weakening of Western influences on global political economy, has reignited a debate on whether earlier interregional interactions can regarded as instances of globalization (Gordon 2008). The connectedness and narrowing of global barriers is often widely viewed as an outcome of European post-medieval intervention, which eventually culminated in the colonization of America, Asia, and Africa (Blaut 1993; Gunder-Frank 1998; Rodney 1974). But is globalization an outcome of European mercantilism in the sixteenth century (Feinman this volume; Robertson this volume)? What of globalisms prior to this transformative period (Jennings this volume; Knappett this volume)?

When did globalization in Africa begin? How and in what ways did Africa and specifically the Swahili Coast become global? As other chapters in this volume have pointed out (see especially, MacEachern, Marshall, and Versluys) Africa and Africans have been connected to Eurasia for millennia as trading partners, mercenaries, pilgrims, travellers, conquerors, and enslaved persons. Do these connections muster the term globalization? How widespread were globalization tendencies and what is the evidence? I explore these kinds of questions below with specific reference to the East African Coast and Swahili civilization.

Eastern Africa's Swahili Coast

Understandings of the archaeology and history of the East African Coast have swung from one extreme to another through the years; from an early narrative where indigenous Africans played little to no role in the rise of Swahili to a more recent one where there is no room for anyone else. This polarizing debate over origins has had the unfortunate consequence of neglecting the important questions of process – how urbanism developed and its long-term consequences on culture. Although Swahili towns were built and inhabited primarily by Africans, the resident population of these towns was drawn from diverse backgrounds; many of them came to the Swahili Coast as merchants and workers (Mitchell 2005; Raaum *et al.* in press). What was the extent and nature of relationships the Swahili formed with mercantile and religious communities from the Middle East and South Asia and the ones they forged with their hunter-gatherer, agrarian, and pastoral neighbours in the surrounding hinterlands and other parts of Africa?

At the end of the first millennium CE, Swahili towns and city-states developed on the East African coast from forager, agrarian, and pastoral settlements (Chami 1998; Wilding 1988; LaViolette 2013). Expanding interregional commerce in the Indian Ocean basin precipitated population growth and economic prosperity, leading to the growth of numerous stone towns between the tenth and sixteenth centuries. In the eighteenth century Omani Arabs took political control of the region, which initiated an Arabization of the Swahili population, consisting of both inter-marriage with politically dominant Omani families, as well as the 're-discovery' of deep lineage origins in Middle Eastern ports such as Shiraz in Iran (Shepherd 1982; Sheriff 2010). This Arabophilic milieu convinced early investigators that Arabs, Persians, and Israelites founded many of the preindustrial cities found in sub-Saharan Africa (Hollingsworth 1929: 38–39; Kirkman 1964: 22). Since the 1980s, a new narrative of indigenous development on the East African Coast has emerged. Post-colonial archaeologists and historians have shown that colonial scenarios of simple migration are not supported by the evidence and that Africans led the development of Swahili urbanism (Beaujard 2007; Kusimba 1999; LaViolette and Fleisher 2005). Both perspectives have undermined progress in understanding the connections that bound communities around the Indian Ocean, creating one of the oldest examples of globalization.

On the one hand, the academically discredited, but still popular, colonization narrative made the study of any external influence politically unpalatable in post-colonial East Africa (Kirkman 1964: 22). The colonial narrative marginalized non-coastal Africans, while post-colonial scholarship marginalized foreigners' role in the development of Swahili society. Despite these narratives, the Swahili world, which extends deep into the interior of Africa, served as and continued to play an important role as the gateway to wider Eastern Africa (Figure 2.4.1). People, goods, and ideas came to or left Africa via the coast (Kusimba 1999). Coastal residents interacted for millennia and shared strong memories of peaceful coexistence as well as conflict. Their shared histories recall the forging of strong, intercommunity, inheritable bonds of friendship and alliances as one of the principle strategies for building partnerships and trust necessary to enable peaceful participation in long-distance trade and exchange networks that sustained global trade between East Africa and the Indian Ocean (Mitchell 2005; Toussaint 1966). Evidence for

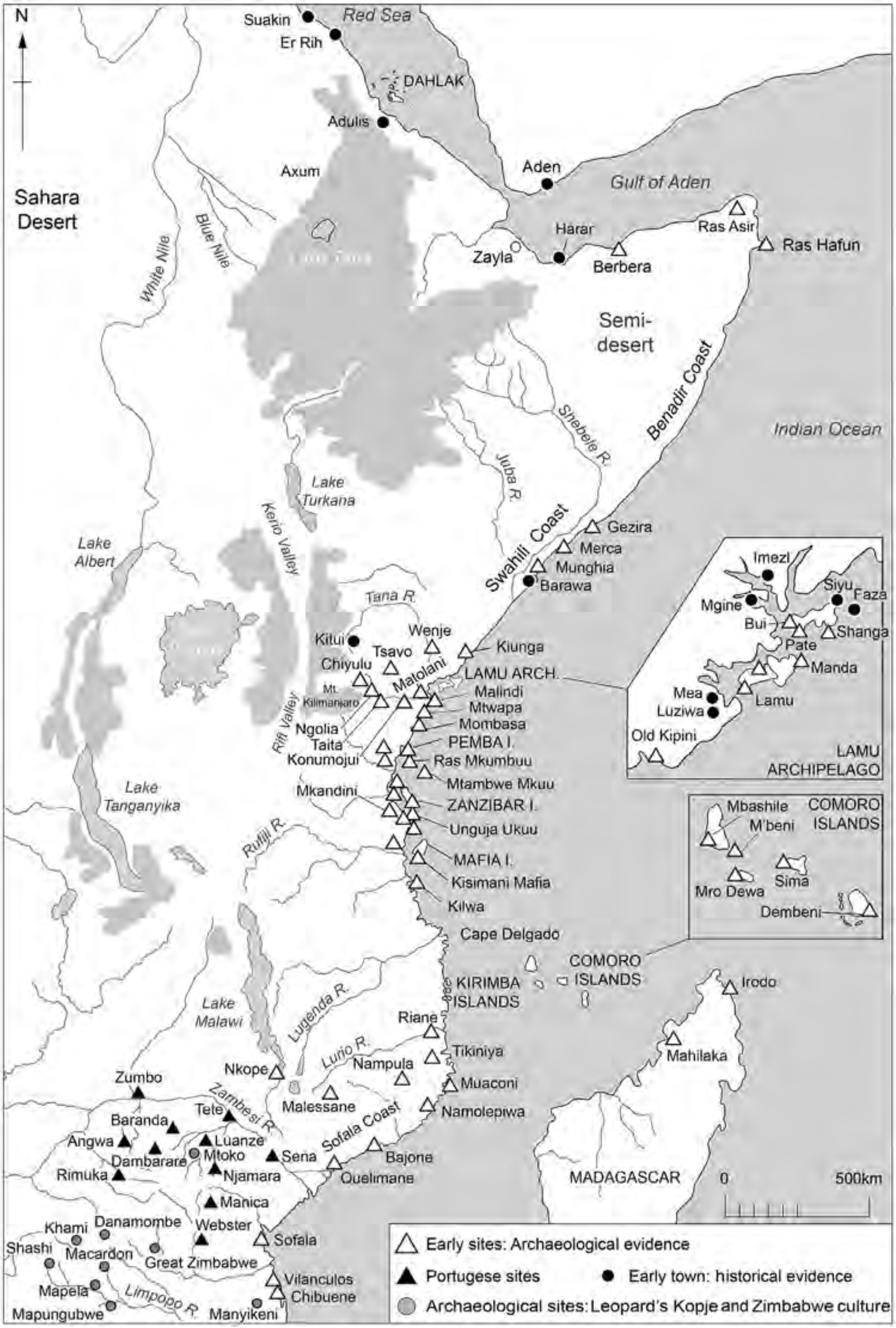

Figure 2.4.1 Map of the East African coast and southern Zambezia showing known Late Iron Age archaeological sites

regular trade among coastal and hinterland groups in iron, ivory, game, cloth, grains, and other products dates to at least the early first millennium CE (Kusimba and Kusimba 2005; Kusimba *et al.* 2013; Walz 2010).

One the other hand, evidence of globalization that ties the Swahili world's reach to the larger Asian sphere is equally compelling. The introduction of Asian domesticates into Africa and African domesticates in Asia, though debated with respect to timing, provide the most potent examples of globalization (Fuller *et al.* 2011; Figures 2.4.2a–d). The presence of trade goods – including Asian glass beads – recovered in virtually all of the 1,500-year-old and younger archaeological sites in Eastern and Southern Africa, as well as in some older settlements, provides critical evidence for examining extra-regional connections. Trade ceramics recovered at coastal and interior settlements provide other data sets for examining trade relationships between Asia and Africa. The introduction of Islam in East Africa in the eighth century (Horton 2013), once heralded as critical evidence for the colonization of the East African coast by south-western Asian settlers (Trimmingham 1964), the use of Arabic script beginning in the thirteenth century, and the development of urban planning spaces that bear close correspondence and similarity with the wider Indian Ocean are crucial evidence of globalization (Allen and Wilson 1979; Fleisher and Wynne-Jones 2012; Wynne-Jones 2013; Wynne-Jones and Fleisher 2014).

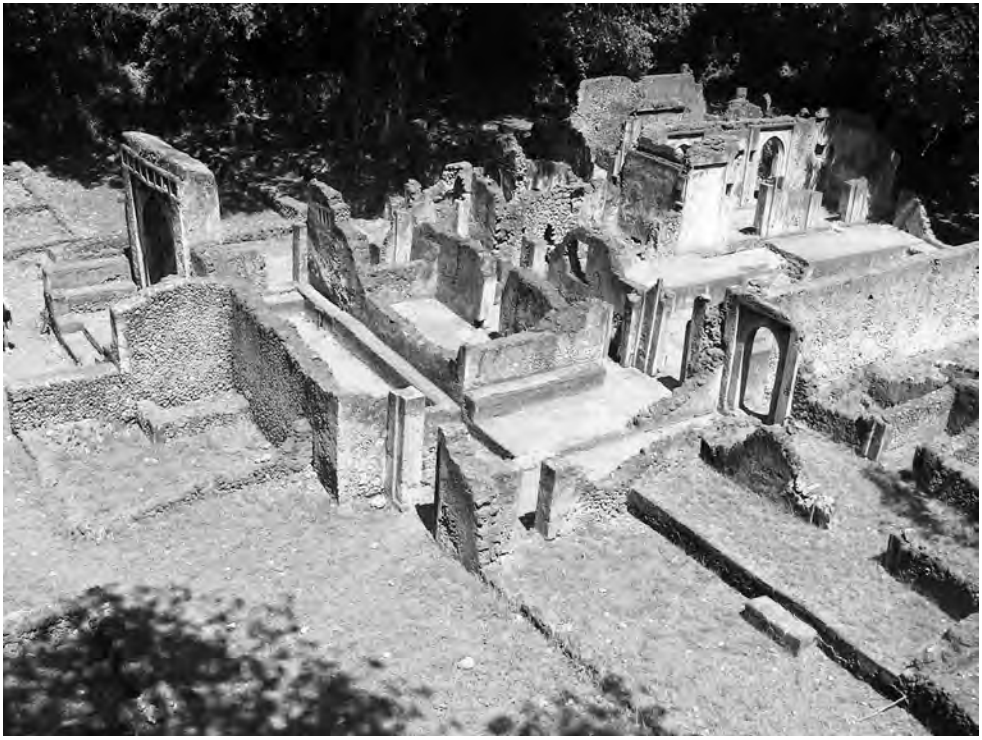

Figure 2.4.2a By the twelfth century, there was a visible and powerful political and economic elite on the East African Coast who were investing in large-scale permanent residences like this still standing nearly 800 years later at Gede National Monument, Kenya. Photo Credit: Chapurukha Kusimba

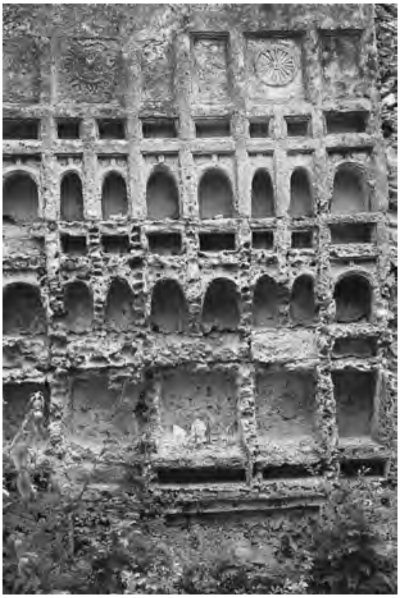

Figure 2.4.2b Introduced in East Africa by merchants who regularly traded with local people, Islam gradually became a religion of choice such that by the thirteenth century the majority of coastal East African cultural, economic, and political affairs were influenced by Islamic traditions. The ruins of mosques such this one at the Gede National Monuments are a part of the cultural landscape of virtually all known settlements on the East African Coast. Photo Credit: Chapurukha Kusimba

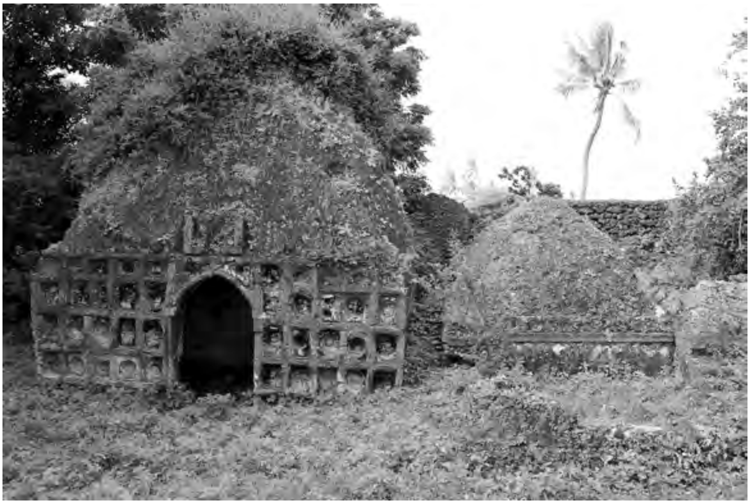

Figure 2.4.2c The super wealthy embraced a global consumption style that is not different from today's elite tastes. We can never truly understand the kinds of artefacts that were displayed in the niches on the ruins of this elite house in Siyu, Kenya, but we sure can appreciate the quality of the workmanship and the willingness to invest in such edifices that were kept in the inner rooms only for the enjoyment of the very few inner circle friends and family members. Photo Credit: Chapurukha Kusimba

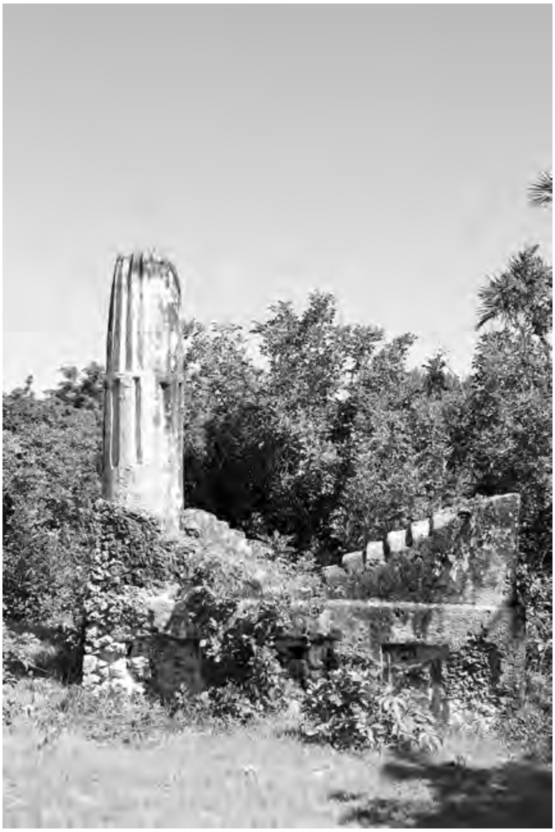

Figure 2.4.2d Archaeological determination of gender equity is often elusive. However, for the East African Coast, Late Iron Age women held as much power as men. Being primarily matriarchal and matrilocal ensured that women inherited their father's estates. In death, these powerful women were often memorialized in domed tombs decorated with expensive, often trade exotica. Similarly, men were memorialized in tombs but unlike women, men's tombs were constructed with a phallic pillar, a tradition that is widely practiced in Northeast and Eastern Africa. Photo Credit: Chapurukha Kusimba

Discerning evidence for globalization on the Swahili Coast

What were the cultural, technological, and biological relationships that existed between the peoples of the Swahili Coast and the Indian Ocean? When and in what ways did the Coast become part of Indian Ocean and Persian Gulf trading systems? What forms did this engagement take and how did they impact regional and interregional interaction spheres? Scholars have tried to address these questions using data drawn from archaeology, genetics, history, linguistics, other allied disciplines, and oral accounts of the Swahili Coast to support the idea of connectivity between the coast and other regions of the Indian Ocean (Allen and Nasir 1977; Casson 1989; Hichens and Nasir 1972; Huntingford 1980). Six decades of research in these complementary disciplines reveal a rich heritage of nearly two millennia of bi-directional exchange between Eastern Africa and other parts of the Indian Ocean world. On the coast, archaeological excavations at large capitals like Gede, Kilwa, Manda, and Ungwana; medium settlements like Mtwapa, Pemba, Shanga, Songo Mnara, and Takwa; and even much smaller hamlet settlements like rock shelters have revealed a rich continuous heritage of three-way interactions in which the Coast is betwixt and between the African mainland and the Indian Ocean. The strategic location of the coastal settlements provided its residents with huge advantages for engaging in both short- and long-distance trade with the interior, along the coast, and with foreign merchants.

Equally important is that work in the hinterland and interior of the coast supports the idea that interaction between the coast and interior connected the subcontinent peoples by complex networks of interaction spheres that predate foreign connections by several millennia (Chirikure *et al.* 2013; Denbow *et al.* 2008, 2015; Kusimba *et al.* 2013; Walz 2010). Direct evidence for these interactions is just beginning to emerge as archaeological and genetic research is carried out (Babrowski 2007; Gifford-Gonzales 2013; Mwacharo *et al.* 2007; Walshaw 2005). Comparative research carried out in the settlements around the Red Sea, the Persian Gulf, and the Indian Ocean reveals close regional correspondence in material culture, specifically with regard to social and structural planning and use of urban space (Whitehouse 1996).

Swahili urbanism as an outcome of globalization

One of the central theoretical issues in the later prehistory of East Africa is the origin of precolonial urbanism and urban societies, which began *c.*600 CE. The East African coast played a crucial role in the Indian Ocean trade that linked East Africa, the Near East, and South Asia. The wealth accumulated by African merchants, who exchanged African products for foreign trade goods, formed the basis of complex urban polities on the coast beginning in the early first millennium CE. These polities later had diverse and well-defined social hierarchies that incorporated social and religious elites, commoners, foreigners, and slaves (Allen 1993; Wilding 1988). The elite managed and financed a complex and extensive interregional trade network. They also patronized craft specialists, including ironworkers, coral miners, mangrove cutters, and sailors. These elites often monopolized ownership of the most productive land, which they then leased out to commoners, newcomers, and enslaved persons (Kusimba 2004; Middleton 1992). They may also have financed specialized farmers, herders, and hunters in the hinterland to provide the bulk of the export trade goods from East Africa, including ivory, skins, rock crystal, slaves, and rhinoceros horns (Kusimba *et al.* 2005; Thorbahn 1979).

The East African coast is an optimal place for studying the long-term processes of urbanization and the development of complex society in Africa. Yet until the late 1980s, little was known about the role that indigenous peoples played in the development of these complex coastal polities. Most histories had reconstructed a Persian and Arab society of conquerors and colonists who settled in East Africa for its trade opportunities (Chittick 1977; Kirkman 1964). Late nineteenth- and early twentieth-century scholars proposed that ruins found on the coast presented the material evidence for the early Asiatic colonization of East Africa. The primary reasons for acquiring trading colonies were to control long-distance exchange between Africa and Asia (Coupland 1938).

The antiquity and volume of trade and exchange in the Indian Ocean and Persian Gulf trading systems is beyond doubt (Abu-Lughod 1991; Chaudhuri 1985; Pearson 2003). These trading complexes have linked East, South East, South, and Southwest Asia to East, South and North Africa and the Mediterranean since at least 1000 BCE, and even earlier in the Bronze Age (*c.*3500–1100 BCE) (Kenoyer 1998). Certainly, the antiquity of African domesticates in Asia and Asian domesticates in Africa and the distribution of trade goods in Africa, Southwest and South Asia attest to this interaction as far back as 2000 BCE, if not before. The most pertinent factor in maritime interactions, especially in the last two millennia, is the growth of hundreds of coastal trading settlements or port-cities along the Indian Ocean littoral, along the African East Coast, and throughout Asia including the Philippines and Japan (Ray 2003). There were two notable periods of intense interaction in both production and exchange prior to industrialization and European colonialism: *c.*100 BCE–400 CE and 800–1700 CE (Allchin and Allchin 1995; Barendse 2002; Begley and De Puma 1991).

Within this interaction complex, the role played by East African consumers and producers has only recently been acknowledged, following much archaeological work along the coast. While the role of migration and population movement is recognized as a crucial element in the spread of ideas, it is de-emphasized in recent studies and minimizes the importance of such interactions – which include technical, cultural, and biological aspects – in shaping the regions. Furthermore, earlier interactions between Southwest Asia and East Africa were minimized in favour of those later ones, which historians thought shaped contemporary coastal ethnic formations (Sheriff 2010).

Minimizing global interconnections has created huge gaps in our knowledge about the complementarity of preindustrial interaction in the Indian Ocean and Persian Gulf regions, which spawned some of the earliest and most enduring manifestations of globalization. Indeed, several scholars have recognized these gaps in subaltern and anti-colonial scholarship and have advocated a regenerating interest in the Early Historic and medieval periods (Dhavalikar 1999; Gogte 2002; Morrison 1997; Ray 2003; Sinopoli 2001). Concomitant with seeking to decode the biological, cultural, and ethnic identities of pioneering communities is the need to understand, in all its facets, the importance of trade and exchange of commodities and technologies between East Africa and Asia, and how these systems influenced the daily life of the regions' populations (Raaum *et al.* in press; Table 2.4.1).

Table 2.4.1 Distribution of archaeological remains at coastal settlements through time

Period	*Time*	*Archaeological finds*	*Transoceanic trade*
Period V	1750–1950 CE	Indo-Pacific beads, glass bangles, Chinese blue on white, Japanese Karatzu ware, European floral ware, Islamic monochrome pottery, iron and iron slag,	Frequent regional and international trade – Persian Gulf, India, China (decline) and Europe, Americas (expand)
Period IV	1500–1750 CE	Stylistically diverse local pottery, Indian pottery, European peasant floral wares	Regular regional and international trade – Persian Gulf, India, China, Indonesia
Period IIIb	1250–1500 CE	Stylistically diverse local pottery, spindle whorls, coins, portable stoves and lamps, chlorite schist, Islamic monochromes, Chinese Longquan and Tongan ware, Indonesian Sawankholok or Sisatchanalai jars, Indo-Pacific beads and Egyptian glass,	Regular regional and international trade with China, Southeast Asia, India, Persian Gulf

(continued)

Table 2.4.1 (continued)

Period	*Time*	*Archaeological finds*	*Transoceanic trade*
Period IIIa	1000–1250 CE	Stylistically diverse local pottery, rock crystal, spindle whorls, copper and silver coins, Islamic Sgraffiato, Chinese Qing Bai, Cizhou ware, Bronze mirrors, Indo-Pacific beads,	Regular regional and international trade with Persian Gulf, Egypt, India, and possibly China
Period IIb	600–1000 CE	Zanjian Pottery: red burnished and bagshaped cooking pots, graphite finish and trellis patterns; Partho-Sassanian Islamic, white-glazed, Chinese green glazed stone ware, grey-green 'Yue' ware, Guangdong Coastal Green, white porcelain, white stone ware, and Egyptian glass, carnelian beads, iron and iron slag	Egypt, Persian Gulf and Indian Subcontinent
Period IIa	300–600 CE	Azanian pottery: triangular oblique, and double zigzag patterns predominate; Sassanian Islamic, glass, and carnelian beads and Roman Amphora	Some trade
Period I	100 BCE–300 CE	Local Early Iron Age pottery, iron and Iron slag	No Evidence

Table 2.4.2 Participants in the global trade in the Persian Gulf, Indian Ocean, and South China Sea

Region	*Local merchants*	*Foreign merchants*
The East African Coast	Swahili (as brokers connecting interior with overseas markets)	Hadhrami, Yemeni, and Gujarat
Red Sea – Aden	Arabs	Gujarati, Swahili, Persians
Mediterranean – Egypt	Mamluk Arabs	Jewish Karimi, Persians,
Arabian Sea – Sohar	Ibadi Muslims of Oman	Jewish Karimi, Persians, Swahili
Persian Gulf – Hormuz	Persians	European, Hindus, Arabs
Gujarati – Cambay	Hindus and Jains	Persians, Arabs, Bengali
Cormandel Coast	Marakkayars, Bengali,	Persians, Arabs, Gujarati
Melaka	Malay	Muslims, Hindu, Chinese

Archaeological excavations have yielded significant evidence suggesting that Muslim and Hindu merchants and entrepreneurs have been actively engaged in long-distance maritime trade with East Africans at least since 800 CE (Beaujard 2007). The bulk of the articles of trade and other commodities were drawn from virtually all regions around the Indian Ocean and Persian Gulf, what historian Michael Pearson has called the Afrasian world (Pearson 1998). The many ports of trade, including Adulis, Aden, Cambay, Sopara, Surat, Kalyan, Dabhol, and Chaul, were all engaged (Barbosa 1918, 1921). Of these ports, Chaul in present-day Maharashtra Province, India, is mentioned numerously in specific documents as the source of cloth and beads, and later as a specialized production centre supplying these commodities to African markets, including the African littorals (Indian Ocean and Red Sea) and hinterland polities such as Aksum, Gondar, Adal, and Afar (Munro-Hay 1996; Pankhurst 1980). Who were these merchants, where and when did they originate, how far was their reach and influence, and what has been their most enduring legacy? Table 2.4.2 provides an illustration of the identities of some of the merchants engaged in global trade in the Indian Ocean and Persian Gulf.

Globalization and identity on the Swahili Coast

The identities of pioneer resident populations of Swahili towns and city-states continue to elude scholarship and form a rallying point for crediting or denying agency. Although it is now widely acknowledged that Swahili towns, like other preindustrial cities, had diverse resident communities, the jury is still out on the question of these populations' origins. Ethnic identities and identity formations were diverse, and were tied to situational and shifting networks sensitive to social, ecological, and class factors (Barth 1969, Mazrui and Shariff 1994). In the case of the Swahili Coast, Thomas Spear notes, '[t]he people labelled "Swahili" by scholars rarely identify themselves as such, choosing identities based on their own town, putative origins, status, or descent group' (2000: 284). Thus the complex history of identity formations coupled with 'race', class, and ethnic identity politics traceable to the colonial period have rendered the anthropological task of distinguishing and apportioning membership into 'real' or 'assimilated' Swahili especially difficult.

Fortunately, the genetic signatures found in other parts of the Indian Ocean and those associated with the Bantu expansion out of west-central Africa are quite different from East African ones (Batai *et al.* 2013). Others have already shown that knowledge gleaned from oral traditions and local histories can provide the means for interpreting archaeological, and presumably genetic, data. For example, Helm (2004) found good agreement between historical reconstructions based on oral history and archaeology for the Swahili's Mijikenda neighbours. Although the archaeological dates of various events were much older than indicated by the oral history, the settlement sequence and demographic patterns were the same.

Ethnography and oral traditions create opportunities to elicit subaltern histories that provide a counterpoint to what have become traditional ways of representing those on the margins of history, whose experiences are likely to be subsumed by dominant voices (Schmidt and Walz 2007). The voices of these residents provide alternative ways of seeing and understanding history. Informant perspectives resulting from multiple social interactions and familiarity often display the complexity, fluidity, and shifting perspectives of ethnicity, identities, and boundaries. These boundaries stretch from the Democratic Republic of Congo in central Africa, across the Persian Gulf to South and Central Asia. Indeed, the universality and dynamism of identities is well attested (Anderson 2006). Crises and conflicts arising from competition for access to resources create opportunities for the development of social networks, which are often sustained through gift exchange, friendship, intermarriage, alliances, and blood brotherhoods and sisterhoods (Herlehy 1984). In Swahili oral traditions, the persistence of these extra-regional networks speaks to the unique global dimensions of the coast. For example, some Swahili families that I have known over the last 30 years, and who are proudly Kenyan, have shared their groups' deep ancestry, which they trace to the area of Shiraz in present-day Iran. In their oral traditions, the ancestors of these Shiraz are the putative foreign founders of many of the major settlements along the coast. Current interpretations of archaeological and historical evidence suggest that this scenario is unlikely (Raaum *et al.* in press). Instead, the Shirazi identity may have developed among the early founding families of cities along the coast as a component of social stratification (Spear 2000). However, Berg (1968) suggests that prior to recent changes in the use and meaning of the Shirazi identity, this term did indicate Asian ancestry.

Pre-colonial daily life cannot be fully comprehended by archaeology and history, despite all their technological and analytical sophistication. However, listening to and learning about daily interactions, problem solving, friendship building and sustenance, conflict, warfare and peace, the ways and means of developing and conducting business outside one's own community, and forms of intra- and inter-ethnic interactions, including intermarriage and divorce, provides us with an arsenal of information critical for interpreting our data. Interaction spheres or social networks enable communities to share risks of resource exploitation (Caldwell 1964; Freidel 1979). These interactions foster the development spheres of knowledge, which are held sway by particular ethnic groups or specific lineages within those ethnic groups. Combined, these systems of knowledge provide the basis for interacting, encouraging, tolerating, and even intermarrying with people who would otherwise be enemies. For example, the Swahili I have interviewed admitted that, despite referring jokingly to their Waata neighbours as *walyanguru* (those who eat pig), they collectively admired the Waata's complex and highly technical knowledge of making and selling poison necessary for efficiently hunting and killing elephants and how this protected them (the Waata) from enslavement by the Swahili. Similarly, Oromo pastoralists dug and maintained water holes and wells in the towns and countryside. Thus, monopolization of certain forms of technical knowledge helped to maintain the long-term, peaceful coexistence among the region's communities (Kusimba and Kusimba 2005).

Engaging local experts in the writing of history enabled me to uncover striking evidence of the collapse of pre-colonial trade. Informants' memories of famine, warfare, and cattle raiding have provided explanations for settlement shifts from the well-watered valleys and fertile flood plains to the infertile but secure hilltops, caves, and fortification of rock shelters. Taita elders' folk typology and use of caves and rock shelters was instrumental for understanding the often-contradictory assemblages recovered archaeologically. Informant testimonies also enabled us to understand and place in proper context the complementary roles of culture (slave trade) and nature (drought) in the dramatic shift in diet from medium-sized to non-migratory small to sub-size game in Tsavo, and the peculiar habit of eating primates and rodents among Mijikenda beginning in the eighteenth century.

Complementary applications of ethno-historic research, archaeological excavations, and ethno-history come together to shed light on understanding and reconstructing global interactions and networks and provide a key hook for the practice of archaeology in this otherwise complex landscape.

Rethinking pathways to complexity and global connectivity

Ongoing research on the medieval period on the Swahili Coast and in Southern Africa's continuous trade beginning before Islam and Christianity in Southeast Africa (Chirikure 2014, Chirikure *et al.* 2013; Sinclair *et al.* 2012; Wood 2012), in the Rufiji Delta and Pangani (Pawlowicz 2012; Walz 2010), and on the coast and interior of Kenya (e.g. Kusimba and Kusimba 2005; Kusimba *et al.* 2005, 2013), shows the existence of regular, continuous interaction and cross-fertilization of ideas, goods, and services. Coastal, hinterland, and interior networks involving the bi-directional movement of trade has been amply demonstrated in these studies (Kusimba *et al.* 2013). On the other hand, transoceanic connections are equally strong and gain prominence, especially beginning from 800 CE onwards (see Table 2.4.1).

As interest in African products in Asia gained in prominence, the Swahili Coast and its emergent managerial and economic elite would increasingly serve as a conduit through which goods, people, ideas, and services would move bi-directionally into and out of Africa. Both connections were vital and brought prosperity to the participants in this transoceanic trading system. The unique location of the coast was advantageous because it created opportunities for the local elites to manipulate their social ties and networks. On the other hand, their positioning had a built-in disadvantage: their prosperity had to depend on the willingness and compliance of their interior and transoceanic trade partners.

Today, the remains of nearly 400 medieval settlements dot the coastal landscape between present-day Somalia and Mozambique (Freeman-Grenville 1958; Wilson 1978, 1980). Nearly double that number has been recovered and countless more coeval sites are known to exist further into the interior, primarily in Kenya, Mozambique, Zimbabwe, and Botswana. These settlements were diverse, ranging from hamlets to chiefdoms, to large city-state and state capitals that were connected by local, regional, and extra-regional trade. Within these settlements are clear distinctions based upon differential access to wealth. The emergent elite seem to have enjoyed unfair access to more development trajectories through characteristic utilization of local materials coupled with knowledge and awareness of each other. For example, along the coast members of the elite exploited the abundant, easily available coral while their hinterland counterparts used dry stone architecture to erect their homes. Both techniques of erecting elite residences are labour intensive, and demand expertise and huge investment in time and resources. Elite investment extended beyond building permanent homes for themselves and their families. Investment in local extractive industry is visible in all contexts: on the coast, coral mining and lime manufacturing, bead making, boat construction, weaving, lumbering, commercialized fishing, while in the interior, iron working, mining of gold, rock crystal and other precious stones, professional hunting of big game for ivory, horns, skins and meat products, agrarian and livestock farming. All of these become important activities.

The consequences of these changes meant that on the coast, the stone house increasingly became a symbol of credit worthiness, prosperity, and elitism (Donley-Reid 1984; Fleisher 2014; Ghaidan 1976), while in the interior, a stone house on the hill, being a successful farmer, owning large herds of cattle or camels, or being a successful and revered hunter served the same purpose (Chirikure 2016; Kusimba *et al.* 2005). Access to some trade items, like Chinese porcelain and Islamic monochromes, was limited by availability and affordability. However, other trade items like beads and cloth, due primarily to their portability and affordability, were distributed and consumed in the entire region. The hundreds of spindle whorls and bead grinders that abound at many sites excavated on the coast show the importance these industries in the regional economy. Thus the interaction spheres that are visible here are the ones in which specialization and monopolization of specific tasks by region and availability become normalized.

The medieval Swahili city-state exhibits three scales of interaction that were crucial for its rise and sustenance: first, there was the state's relationship with nearby rural fishing and farming villages; second, partnerships with mainland communities; third, the relationship with various trading partners via Indian Ocean networks. At each of these three scales, material evidence connects the state with economic and social interactions that gives us clues to the evolution, character, and constellation of Swahili civilization. Like other any other state, the medieval Swahili state was characterized by inequality in access to crucial coastal resources, such as human labour, arable land, fishing areas, and mangrove forests. As Indian Ocean trade networks overlay these local inequalities, regional and international trade goods were incorporated into elite-controlled social and economic networks. These three scales or levels do not have a necessary chronological relationship, and each of them could be paramount in any particular region at any particular time. The question of the relative importance and the nature of interactions at these three scales is an empirical one.

The trading centres of East Africa were linked together in urban clusters where different locations had specializations in production and trade. Data from both coastal and other sites in the interior illustrate the importance of regional, multiscalar approaches towards understanding early interactions and exchange (Kusimba *et al.* 2013; Sinclair *et al.* 2012). For example, the port of Chibuene was 'a nodal point connecting individual traders from at least three networks: the Southern African interior, the northern coastal trade network and the transoceanic trade network' (Sinclair *et al.* 2012: 735). The interconnectness of the regions is thus predicated upon the presumption that major transformations in one of the nodes will have ramifications for the whole system, including causing system collapse. For example, the period between 1300 and 1850 CE was characterized by periodic, severe, unpredictable weather patterns that resulted in widespread drought, famine and disease epidemics, including the plague (Nicholson *et al.* 2013; Sundqvist *et al.* 2013). These had the consequence of weakening regional trade and cohesion as communities competed for declining resources. Region-wide settlement abandonment and migrations in search for food and pasture caused tensions and interregional warfare (Kusimba 2006). A second example is drawn from the sixteenth century, when the entire region began to experience gradual decline, insecurity, warfare, and settlement abandonment. Changes in one node, in response to local competition, might result in a shift in allegiance and power dynamics that do not necessarily affect the entire system. For example, the decline of Mapungubwe in southern Zambezia in the thirteenth century saw power shift to Great Zimbabwe without affecting region-wide interactions (Pikirayi and Chirikure 2011).

Pathways to complexity and globalization

Complementary data drawn from historical, ethnographic, and archaeological sources enables the reconstruction of the founding of the medieval Swahili city-states from egalitarian to centralized, ranked systems of leadership (Kusimba in press). Before 1000 CE, itinerant traders, ritual specialists, and technical experts who regularly travelled between settlements selling their services and merchandise dominated regional trade. Emergent leadership held sway over certain spheres of knowledge, such as ritual experts, healers and herbalists, rainmakers, iron smelters and smiths, well-diggers, big game hunters, pearl divers, canoe and boat makers, and itinerant hawkers and traders. These spheres of knowledge became increasingly restricted to small, family or extended family networks and were thus highly desirable and complementary (Kusimba and Kusimba 2009: 243). It suffices to say that leadership was in place, but it was not sufficiently integrated. It was from these ranks that leaders and rulers would emerge at around 1000 CE.

Autonomous polities emerged by at least 1200 CE. Demand for African products increased, leading to the intensification of regional and Indian Ocean trade. The economic boom enabled engagement in the trade in these commodities on a full-time basis, rather than as vocational experts. For example, with increased demand for ivory, hunters became more specialized demanding better weapons and poisons for killing elephants. They experimented and developed more potent poisons to efficiently procure their prey. As more people migrated to the trading centres for longer periods, the need for more lodges, houses, and wells became necessary. These developments required management and planning. Due to their knowledge, the local leadership consisting of ritual and technical experts were the more likely to emerge as the managerial elite.

By 1000 CE, the coast had become a regular partner in the millennial-old, long-distance exchanges that reached as far as the Arabian Peninsula, India, Sri Lanka, and China. By the thirteenth century, there had emerged an African urban elite that financed, managed, and controlled local, regional, and interregional trade and communications along the East African seaboard

(Calabrese 2007: 211–16; Chirikure *et al.* 2013: 358). Innovations in ironworking aided agricultural intensification and specialization in hunting, fishing, and herding. These changes improved the quality of life and precipitated population growth and economic prosperity for some 200 years. In the late fifteenth century, however, the coast became embroiled in a long-standing conflict between Christendom and Islam, represented by the Portuguese and Omani Arab mercantile interests. The Portuguese and Muslim rivalry for control of Indian Ocean commerce was economically crippling for East Africa.

By 1500 CE, the appearance of the Portuguese in Africa and Asia challenged the interregional elite hegemony based upon networks of interaction that extended from Mozambique through Mombasa, Cairo, Aden, Surat, Bombay, Siraf, and their outlying hinterlands. The Portuguese, and later the Dutch, English, and French merchants, challenged Afrasian elite power and the economy of these polities, states, and empires (Pearson 1998). The gradual establishment of European economic and political hegemony in the Indian Ocean, along with climatic and disease factors and enhanced demands for slave and indentured labour, precipitated the decline and collapse of an earlier global system that had lasted nearly 800 years and established a new one that persists today (Acemoglu and Robinson 2012).

Conclusions

Globalization on the Swahili coast was a product of trade networks on local, regional, and international levels (Monroe 2013: 24). The interrogation of data from an interregional perspective provides a long-term document of herding, pastoralism, and agriculture, the rise of urbanism, and its decline and collapse on local, regional, and extra-regional levels. When data from many sites within the different ecological zones and regions is integrated, it allows for systematic comparative analysis of these changes and social patterns on a global scale.

The specific geographical location of coastal society influenced a mercantile character, such that social and economic processes on multiple geographic and temporal scales shaped it. The emergent elite in the region, but especially on the coast, manipulated their strategic location as middlemen to amass power. They also kept at bay any potential rivalry from new immigrants into the region. They understood that their favourable location in these coastal settlements could not be usefully exploited without forging partnerships with the hinterland, other coastal communities, and foreign merchants. These partnerships involved formalizing affinal ties into long-lasting friendships that promoted peaceful coexistence, tolerance, and the sharing of the region's diverse resources. Wealth accumulated from these interaction spheres created inequality; this would, in time, increase the social, class, and ethnic consciousness of the coastal region, which increasingly embraced a global Indian Ocean culture while also strengthening its local networks (Mazrui and Mazrui 1998; Mazrui and Shariff 1994). Ancient trade between the Swahili Coast and Asia was a complex global affair that involved many communities and took several routes that traversed both land and sea. The influences of this global trade are still visible today.

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2.5

European colonialism and globalization in Africa in the nineteenth century CE

Lydia Wilson Marshall

Introduction

As in other world regions, colonialism and globalization in Africa have been closely linked processes. Africa, of course, was far from geographically isolated before Europeans gained territorial control of much of the continent in the late nineteenth century (Mitchell 2005). Yet, colonialism fundamentally changed Africa's relationship with the rest of the world. Far from equal players in a world marketplace, many African regions were reduced to the production of raw materials for export in exploitative 'vampire' economies designed to enrich Europe at Africans' expense (Rodney 1972: 149). The enduring political and economic effects of European colonialism on Africa are hard to overstate; some researchers have likened the continuing economic inequities Africa faces in contemporary globalization to a new kind of colonialist enterprise (Rhodes 2010: 201). In retrospect, it is easy for Europe's conquest of Africa to appear inevitable. Yet, our interpretations are susceptible to teleological tropes if European colonialism is perceived as bound to have happened or as a unified process. Materially grounded archaeological analyses help to destabilize and disrupt such certainty by revealing colonialism in Africa as a diverse and variable process – a series of encounters, negotiations, and conflicts that fundamentally altered Africans' sense of place in the world (Swanepoel 2013: 971), and the world's sense of Africa's place within it.

In 1885, representatives from twelve European countries, the United States, and Turkey met in Berlin and famously took metaphorical scissors to the African continent, dividing much of its territory between them. Few events so powerfully capture the callousness of colonialism as the Berlin Conference. The agreement that signatories reached is often considered the starting shot for the 'Scramble for Africa', a thirty-year period in the late nineteenth and early twentieth centuries when the vast majority of the continent fell under European control (Apoh 2013: 354–55). Yet, colonial control, of course, was not achieved in Berlin by the stroke of a pen, but on the ground in Africa. Archaeology can help us analyse this process, and the way this shaped subsequent globalizing trends on the continent and further afield.

More specifically, most historical archaeologists working in Africa, as elsewhere in the world, have focused their research on European expansionism and colonialism. Indeed, one famous definition of historical archaeology casts it as the study of 'the spread of European culture throughout the world since the fifteenth century and its impact on indigenous peoples' (Deetz 1977: 5; see also Orser 1996). Colonized and other oppressed peoples are generally poorly represented in written records, and archaeologists have long argued that the analysis of material remains allows us to better access and understand their lives. Schmidt and Walz (2007a, 2007b) have persuasively critiqued historical archaeology's focus on the effects of European contact and colonialism in Africa. They urge archaeologists to give more heed to indigenous historical perspectives, recognize and exploit the interpretive value of local oral histories, and decentre Europe from analyses of Africa's recent past (see also Schmidt 1978, 2006). Yet, despite the risks of interpretive Euro-centrism, the archaeology of European colonialism in Africa has much to contribute to an analysis of the beginnings of our 'modern world' (Hall 2000) – a world defined in large part by increasing globalization (Appadurai 1996). The flood of mass-produced European goods in nineteenth-century Africa represents some of the most visible archaeological markers of colonialism on the continent; it also importantly points to the emergence of global material culture and cultural sensibilities.

Colonialism and globalization

Archaeological conversations about colonialism continue to grow in theoretical sophistication and geographic scope (e.g. Stein 2005; Voss and Casella 2011). Yet, despite increasing archaeological attention to nineteenth-century imperialism in Africa, the continent remains peripheral to most such disciplinary dialogues (Richard 2010: 193). Archaeology offers a means to assess both how colonialism affected Africa and how Africans responded to its effects. A recent interdisciplinary fluorescence of globalization studies provides a theoretical framework to ground this inquiry. Globalization frameworks are particularly useful for the study of colonialism in their recognition of the hybridity of all cultures, the interplay between local and global settings, and the agency of both colonizers and the colonized. Studies of European colonialism in Africa can also contribute to theories of globalization, in particular the continued debate about whether globalization is a strictly modern or more time-deep phenomenon (Jennings 2011, this volume; Feinman this volume; Robertson this volume).

The term 'globalization' was not in common usage by academics until the 1980s but, in the decades since, has become very popular with anthropologists, sociologists, and political scientists alike (Waters 2001: 2). Yet, while academics increasingly embrace globalization as a research approach, they do not yet agree on what 'globalization' actually means. Tomlinson (1999) defines globalization as part and parcel of modernity. He argues that contemporary technologies (air travel, telephone, fax, and internet) have enabled a time–space compression. That is, places that are geographically remote have been become much more accessible in contemporary times, leading to a greater sense of unicity – the sense of the world as one place (Tomlinson 1999: 10). Today, events that happen far away can have as much of an effect on daily life as events occurring nearby, leading to a heightened awareness of the broader world and one's place in it.

Jennings (2011, this volume) takes issue with the idea of global connection and intercultural contact as something particularly modern (see also Feinman this volume). Indeed, humans have never lived in isolated groups. The idea of insular 'billiard ball' cultures bouncing off one another – so memorably critiqued by Wolf (1982: 6) – is today widely recognized by anthropologists as wrongheaded. Rather, all cultures are 'porous, leaky, [and] absorbent' (Richard 2013a: 64). In other words, all cultures are hybrid, affected by local and global cultural currents. If we reject the imprecise use of 'globalization' as a synonym for 'Westernization' (Robertson this volume), the presence of inter-regional connections in deep antiquity weakens the argument that globalization is only a modern phenomenon. As other chapters in this volume show, long-distance trade and the cultural diffusion of technology and crops thousands of years ago highlight the impact of faraway places on ancient peoples.

Yet, both Jennings (2011: 22, 28, this volume) and Tomlinson (1999: 41) recognize that global connections alone do not constitute globalization. Rather, globalization is also linked to the emergence of a homogenized global culture and localized responses to this culture. Miller (1998), an archaeologist turned social anthropologist, has persuasively argued that Coca Cola is embedded in local systems of use and valuation in Trinidad, making the soft drink simultaneously a global and a local product. His larger argument, that 'globality is itself a localized image' (Miller 1998: 260), casts globalization and localization as two sides of the same process, whereby a homogeneous 'global culture' is modified to better fit specific local settings (see also Jennings 2011: 30–31, this volume; Robertson this volume). Recent critiques of Romanization in classical archaeology have followed a similar logic, suggesting that indigenous responses to imperial Roman culture deserve much more academic attention (Hingley 2005; Pitts and Versluys 2015). The social process by which the global is made local – with certain foreign cultural practices and materials adopted and others cast aside – is archaeologically accessible. That is, through archaeology, we can understand how Africans mediated European colonialists' increasing cultural hegemony. Counter-currents and resistance to globalization are central parts of the process of globalization itself (Robertson 1992: 10).

If we cast our eye back into Africa's precolonial past in search of global cultures that adapted to specific local settings, we might consider the Swahili Coast in the second millennium CE and its inhabitants' long-standing mercantile and cultural connections to the Middle East (Horton and Middleton 2000; Kusimba this volume). The impact of ancient Egyptian culture on the Kush region in Nubia seems similarly relevant (Hafsaas-Tsakos 2009; Versluys this volume). Swahili and Kush cultures could each be described as hybrid, and, indeed, archaeologists have been much more apt to discuss hybridity than globalization in precolonial settings (Jennings 2011: 33). Yet, in both the Kush and Swahili cases, global connections *and* global culture are evident, bolstering researchers' growing recognition of globalization as a long-standing and time-deep historical process (Waters 2001: 7; Nederveen Pieterse 2004: 100; Bentley *et al.* 2005: 14).

Decoupling globalization from modernity has helped archaeologists understand how dense global interconnections may form in a variety of settings (Jennings 2011; LaBianca and Scham 2006). Jennings's (2011: 12, this volume) insistence about the existence of many globalizations rather than one central globalization/Westernization process has yielded particular insight into the probable ubiquity of globalization(s) in the past. Hingley (2005: 6) has similarly critiqued the artificial separation of 'modernity' from earlier periods as ahistorical (see also Feinman this volume). Yet, if globalization is not a new phenomenon, are European colonialism and its attendant global culture in nineteenth-century Africa at all special? Were the same processes at work in the Wari Empire or at Cahokia (Jennings 2011; Knappett this volume)? Appadurai has grappled with these questions at length, critiquing the idea of 'some single moment – call it the modern moment – that by its appearance creates a dramatic and unprecedented break between past and present' (1996: 3). Yet, in the same breath he argues 'the world in which we now live . . . surely does involve a general break with all sorts of pasts' (Appadurai 1996: 3). Appadurai links this rupture to globalization, which he calls modernity at large.

The 'modern world' (Hall 2000), with which historical archaeologists have been so concerned, is defined by contemporary power relations and processes rooted in European imperialism. While recognizing parallel examples of globalization in the deeper past is useful, we must also acknowledge the unique and long-lasting effects of the processes of globalization entwined with European colonialism. The archaeology of nineteenth-century Africa remains a developing field, with only scattershot coverage of the continent. Additionally, some important research topics – including the role of religion – are excluded here for want of space. The case studies presented in this chapter are by no means exhaustive, but they do represent the general range of types of research that may benefit from a globalization theoretical approach. I particularly consider archaeology's utility in analysing the linked processes of globalization and localization, the active role of material culture in shaping cultural change, the manipulation of material culture as a marker of status, and globalization's effect on landscape and conceptions of space.

Localization and globalization

Richard (2010, 2011, 2013a, 2013b) is one of the few historical archaeologists working on African material to engage with globalization theory explicitly. His research has emphasized the local transformation of global culture in nineteenth-century Siin, Senegal. Since localization and globalization are closely linked processes, Richard asserts that 'the proper path to studying worldwide connections is to attend to the "production of locality"' (Richard 2013a: 43). That is, globalization must be studied in the cultural microcosm: only by understanding how inhabitants of Siin incorporated foreign beliefs and objects into local cultural logics may we begin to map the broader inter-regional webs in which the region was entwined.

French colonization of Senegal began in the 1850s, but territorial control was uneven. In the late nineteenth century, many provinces remained protectorates, with considerable power retained by indigenous elites. Siin was invaded twice by the French in 1859 and 1861, became a protectorate in 1887, and was only formally incorporated into the colony in 1920 (Richard 2013b: 61). This specific timeline allows us to recognize 'colonialism' not as a thing but as a process; historically contextualized and materially grounded analyses are thus necessary to avoid abstracting the 'colony' or 'empire' as a single, homogenous entity (Richard 2010: 196).

Richard's archaeological work suggests that inhabitants of Siin did not incorporate European culture and goods wholesale, but rather were selective about which aspects they adopted. For example, while imported textiles, alcohol, and metallurgic technology were embraced, Siin inhabitants largely rejected imported ceramics, imported pipes, European house style, and European fishing technology (Richard 2013a: 57). The archaeological ubiquity of certain imported goods and the near absence of others in Siin undercuts 'the idea of a homogenous force of global modernity implacably levelling the cultural terrains of non-European societies' (Richard 2013a: 58). Many other studies across Africa (e.g. Marshall 2012) have noted similar selectivity in how indigenes incorporated European goods into their everyday lives. The uneven adoption of European material culture in Siin demonstrates the continued agency of its people under colonialism. Colonialism and concomitant processes of globalization were not simply passively experienced by Africans, but rather actively mediated by them.

Equally important is how archaeological data from Siin helps us analyse the localization of the global – that is, how the acceptance of certain foreign goods and rejection of others relate to local cultural logics and systems of value (Prestholdt 2008). Imported pottery was only rarely incorporated into communal cooking and eating practices in nineteenth-century Siin. In contrast, glass assemblages from Siin suggest that the consumption of imported alcohol increased substantially after 1860 (Figure 2.5.1). The ubiquity of alcohol glass reveals alcohol's central place in colonialism in Siin (Richard 2010: 13). Yet, the ways in which alcohol was typically used – in labour parties, in ritual feasts, and in ancestor worship (Richard 2010: 207, 2013b: 71) – suggest that Siin inhabitants' perception and consumption of alcohol sat outside European cultural norms. As with Coca Cola in Trinidad (Miller 1998), the specifically local uses of imported wine and trade liquor in Siin show how they became local products. Local cultural practices were also shaped by the incorporation of global materials in Siin. The increasingly central place of

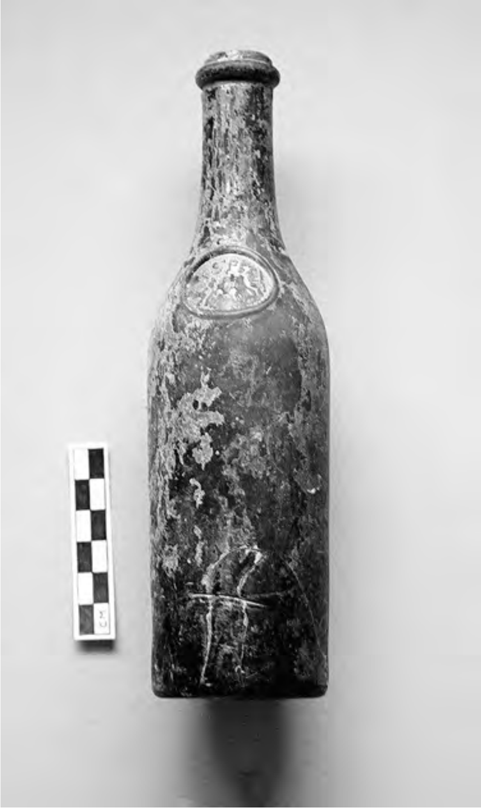

Figure 2.5.1 Machine-made Pernod bottle recovered from the archaeological site # S77, Siin, Senegal. Courtesy of and copyright held by François Richard

trade goods in dowry payments, barter, debt, and inheritance changed not only the material world of local inhabitants, but also their sense of place in the world (Richard 2013a, 2013b).

Thiaw's (2011) work at Gorée Island, Senegal, suggests that African inhabitants there were much less selective in their adoption of European material culture. Gorée Island is best known today for its dominant role in the memorialization of the transatlantic slave trade. The island's House of Slaves Museum and its famous 'door of no return' remain popular tourist destinations (Thiaw 2008). Despite Gorée's continuing public popularity, academics have long argued that only a relatively small number of captives transited through the island into the overseas slave trade (Thiaw 2011: 147). In addition, the continued emphasis on the transatlantic slave trade at Gorée has diverted attention from European colonization of the island and its effects on resident Africans. A mere 900 metres in length, Gorée Island is a unique setting in which to study the processes of colonialism since all inhabitants, European and African alike, lived in very close proximity to one another.

Gorée Island was apparently home to a small, permanent, indigenous settlement before the Portuguese arrived around in 1450 (Thiaw 2008: 52). In the succeeding centuries, control of Gorée oscillated between various European powers, including the Dutch, British, and French. Archaeological work on the island shows that European imports only first become common in the eighteenth century while under French control (Thiaw 2011: 150). The absence of a firm archaeological footprint from Europeans in the fifteenth, sixteenth, or seventeenth centuries suggests that earlier occupations may have been more tenuous. By the eighteenth century, most African inhabitants of the island were indigenous slaves, a population that exceeded 5,000 at one point in time (Thiaw 2011: 155). Thiaw (2011: 149) also identifies a small, more elite group of *signares*, free women of African or African-European ancestry who were often the wives of European colonists.

In the eighteenth and nineteenth centuries, European imports were not only widely available on Gorée but also apparently indiscriminately consumed. European ceramics, construction materials, alcohol glass, beads, pottery, metal hardware, pipes, and gunflints are uniformly distributed throughout the island (Thiaw 2011: 161; Richard 2013a: 53). Yet, an examination of *how* people used these artefacts reveals different underlying cultural logics. Initial vessel form analysis of imported wares suggests that enslaved Africans preferred larger serving dishes to facilitate communal eating while individualized place settings were more commonly used by European colonists and elite African-European *signares* (Richard 2013a: 53). Still, both elite African-Europeans and European colonists likely ate food cooked by African techniques, given the charring identified on the outside of many large, locally made vessels (Richard 2013a: 53). In addition, despite *signares*' apparent use of more individualized place settings, Thiaw argues these African-Europeans retained a 'worldview . . . fundamentally grounded in African culture' (2011: 161) and often ate communally with their slaves.

Thus, the apparent indiscriminate adoption of European material culture in Gorée by Africans, enslaved, and elite alike cannot be used as a proxy for a similarly enthusiastic adoption of European cultural mores. Archaeologists have long recognized problems with previous acculturation studies, which relied on the prevalence of European goods to gauge the degree of European cultural influence (e.g. Alexander 1998: 478). A more practice-based approach allows archaeologists to investigate how global goods were incorporated and used according to local cultural logics and how they altered those logics. Culture is not only 'its material goods' (Tomlinson 1999: 83). To understand globalization, we must look first to localization, whereby European goods at Gorée were, in some sense, domesticated according to local cultural expectations and practices (Miller 1998).

Croucher's (2011, 2015) work in East Africa echoes similar themes. She has argued forcefully that European ceramics, specifically large serving dishes, became important tools for local expressions of hospitality on Zanzibar in the nineteenth century. Omani imperialism in East Africa dates back to the seventeenth century, and Zanzibar became Oman's colonial seat in 1832. Formal British control of East Africa did not extend to Zanzibar until the 1890s. However, the influx of imported goods from Europe shows the creep of both European capital and political influence much earlier in the nineteenth century.

Croucher's (2011: 175) ceramic analysis has shown that the consumption of European pottery in Zanzibar favoured decorative styles much less popular elsewhere in the world. Sponge-printed and brightly hand-painted wares were especially well represented; these decorative techniques are much less common in European and North American assemblages. Imported ceramic assemblages in Zanzibar were also notable for the over-representation of large platters (Figure 2.5.2). Croucher (2011: 179) argues that these large serving dishes were important for the local performance of *ujirani* or neighbourliness at special occasions like weddings. Thus, the use of these ceramics was shaped by local needs and local cultural logics. Even more importantly for our purposes, however, is Croucher's analysis of how the demand for specific decorative techniques and vessel forms in Zanzibar affected ceramic production centres in Europe (Croucher 2011: 184). Her work reminds us that globalization is not a unidirectional flow of change, but rather a multidirectional process. Zanzibar shaped Europe as Europe shaped

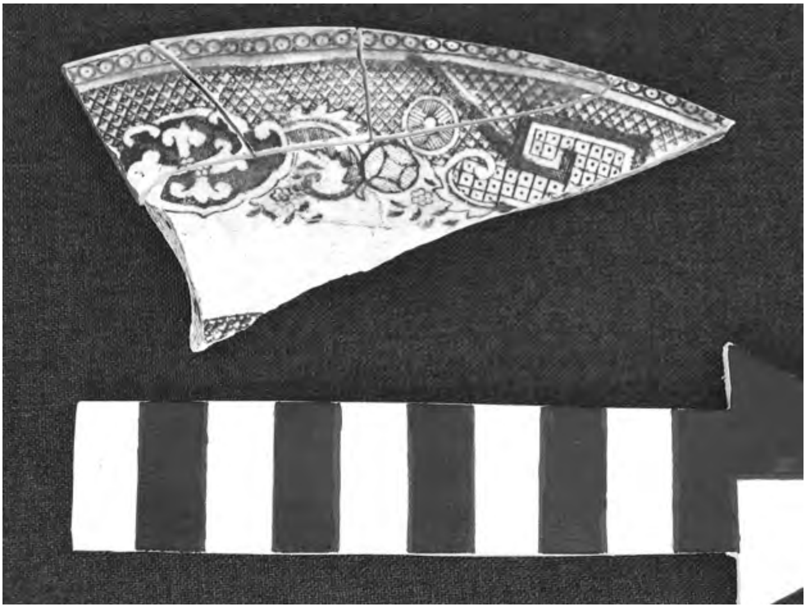

Figure 2.5.2 Black transfer-printed willow pattern platter recovered from Mgoli, Pemba, Tanzania. Courtesy of and copyright held by Sarah Croucher

Zanzibar. As Prestholdt's (2008) analysis of historical records elegantly illustrates, such a dialectical relationship also existed between Zanzibar and nineteenth-century New England.

Material culture and cultural change

Stahl's (2001, 2002) well-received work in Banda, Ghana, deepens our understanding of the interplay between localization and globalization. Through an analysis of imported beads, pipes, metal, and ceramics, Stahl demonstrates that local cultural practices may change with the incorporation of foreign goods. Banda was integrated into the Gold Coast Colony only around the turn of the twentieth century. Yet, Stahl's analysis shows how local cultural practices shifted with increasing British colonial presence and pressure in the decades prior to Banda's formal annexation. For example, imported beads and pipes became both more numerous and more standardized in the final decades of the nineteenth century. Such homogenization and ubiquity appear to have changed how these items were viewed and used in Banda. While European beads had replaced locally made beads in ritual contexts as early as the eighteenth century, the abundance of imported beads and their even distribution across Banda settlements in the late 1800s suggests that beads were no longer ritually powerful items, but rather quotidian and less carefully curated baubles (Stahl 2002: 839). Pipes, like beads, had been more heterogeneous in their style in earlier periods. In the eighteenth century, most pipes in Banda had been made by local craft specialists or obtained through regional trade. But by the 1890s, homogenous long-stemmed pipes from Europe had largely replaced West African styles (Stahl 2002: 838). While earlier inhabitants of Banda had used pipes to signal distinctions in social status (Stahl 2002: 840), the homogenous appearance of imported pipes and their easy availability meant that they could not be used in the same way.

Imported goods not only reflected but also shaped changes in cultural practice in Banda. The easy availability of European iron imports decreased smelting in the region while simultaneously increasing smithing, as imported iron was generally of lesser quality and had to be reworked to 'local standards' (Stahl 2001: 45). Imported pottery similarly disrupted existing West African regional trade networks, though local production of ceramics continued (Stahl 2001: 51). Foreign imports in the region thus are not simply a reflection of cultural and political processes, but, rather, actively helped to shape those processes. Stahl's analysis locates globalization in the interplay between local production of specific types of goods and the consumption of their imported counterparts – that is, in the changing 'production of locality' (Richard 2013a: 43).

Global goods, status, and identity

Elsewhere, the 'domestication' or 'indigenization' (Tomlinson 1999: 84) of global goods included their manipulation as markers of status. Some mass-produced imports (like pipes and beads in Banda) were too ubiquitous and standardized to be effective status markers. However, many other global goods retained symbolic potency as Apoh's (2013) recent work in Kpando, Ghana, shows. After a successful military campaign against local inhabitants, German colonialists established Todzi as an administrative outpost for the Kpando region around 1889. After Germany's defeat in World War I, Todzi fell under British control (Apoh 2013: 359–60). Todzi sat on a high, flat plateau and was strategically located to survey surrounding indigenous settlements. The site had been home to a shrine for a local god, which German colonialists cleared before building several administrative, European-style structures in rock and brick (Apoh 2013: 370). These structures – like European clothing, ceramics, language, and manners – were central to German (and later British) efforts to mark colonialists as culturally and socially distinct from local indigenes.

Apoh's (2013) research, however, suggests that indigenous Kpando elites opportunistically adopted European material culture as symbols of social distinction. Kpando elites used European building styles for their homes and developed a broad taste for 'European material culture and mannerism' (Apoh 2013: 370). Indeed, the site's distribution of imported ceramics, local ceramics, and fauna shows no distinction between local and colonialist populations (Apoh 2013: 371–72). That is, these populations are archaeologically indistinguishable. The material similarity of colonialists and indigenes stems largely from African elites' strategic use of European material culture. Similarly important to recognize are the practical constraints under which colonialists operated. For example, European colonialists and local African people ate similar local fauna at Todzi; both also used local ceramics. Globalization should not be reduced to Westernization: as colonized Africans absorbed European cultural elements, so too did European colonialists absorb African cultural elements. The development of global culture is not simply the emergence of European cultural hegemony. African contributions to global culture deserve deeper academic attention.

Global culture, like all cultures, encompasses more than material objects. The challenge for archaeologists is to consider how people *use* global goods, since 'interaction with these goods penetrates deeply into the way in which we construct our 'phenomenal worlds' and make sense of our lives' (Tomlinson 1999: 83). The fruits of a practice-based approach to analysis are highlighted by Weiss's (2011, 2015) recent work at the late nineteenth-century Halfway House Hotel, which catered to miners in the diamond fields of the British Cape Colony, now part of South Africa. The Halfway House operated both prior to and after mine workers were racially segregated in the 1880s. Prior to segregation, indigenous miners had mingled at the hotel with white migrant workers from Europe, America, and Australia. Trash middens dated to this more integrated period yielded an abundance of British transfer-printed whiteware and porcelain.

The profusion of such delicate ceramics at the remote hotel suggests that its proprietors made some effort to present a 'respectable' table service. Tin dishes, after all, would have been much less easily broken in transport or during use. Ceramics, Weiss (2011, 2015) argues, were useful as symbolic markers of the propriety of both the Halfway House establishment and its (racially and culturally diverse) clientele. However, the decorative diversity of the ceramic assemblage was very high prior to segregation – 25 decorative patterns were represented in a 10-year period, strongly suggesting that individual place settings were unmatched. Additionally, the lack of serving tureens and a profusion of local fauna at the site points to a 'significant degree of improvisational meal service' (Weiss 2011: 228). That is, while global goods were symbolically harnessed to represent respectability at Halfway House, their use was shaped by local conditions and culture.

In the 1870s, diamond prices spiralled downward after the international market flooded. As their income dropped, white workers feared that an illicit local diamond trade controlled by Africans was undercutting their business. These tensions eventually led to the racial segregation of mine workers in the 1880s. After segregation, Halfway House's ceramic assemblage is primarily composed of plainer, less decorated wares. The plain white ironstone china and whiteware recovered were likely paired together to make matching individual place settings. The hotel's clientele was strictly white after segregation, and Weiss argues that the Halfway House developed a more 'homogenized, professionalized and "sanitized looking" system of presenting service to clientele' (Weiss 2011: 233). The presence of serving tureens and the abundance of platters after segregation suggest that food was no longer served from the kitchen itself (Weiss 2015). The more homogenous, 'clean', and 'professional' imported ceramics used at Halfway House after segregation helped to underpin the broader symbolic division between white miners who ate there and their indigenous African counterparts. With the seeds of apartheid planted, this symbolic division became more important to express and police.

The archaeological studies presented thus far in the chapter underline the complexity of global culture. Globalization is not simply defined by the presence of global connections in a region but also includes the development of shared cultural sensibilities. However, global culture should not be reduced to what has variously been called 'cultural imperialism' (Tomlinson 1999: 79) or 'McDonaldization' (Nederveen Pieterse 2004: 49) – a wholesale replacement of prior indigenous worldviews with a Westernized monoculture. Global culture is better understood as the development of a (mostly) mutually intelligible symbolic language between regions. This symbolic language changes according to local dialect, and its 'words' encompass not only imported objects like ceramics but also manners, dress styles, language, and cooking techniques. Global culture is much more than global goods.

Space and globalization

Many theoreticians argue that globalization changes people's perception of space on a large scale. Specifically, the easier and faster movement of goods and people between regions leads to a greater sense of 'unicity' or the world as one place (e.g. Tomlinson 1999: 10). Rhodes (2010) demonstrates how many of the landscape changes that German and British colonialists made in the nineteenth century brought East Africa into a closer economic relationship with the rest of the world (see also Biginagwa 2009: 58; Lane 2010: 309). Much of the colonial infrastructure worked to ease the extraction of resources from Africa (Rhodes 2010: 198). Europeans' rule of urban areas, control of coastal waterfronts, appropriation of existing trade routes, and construction of railways into the East African interior all benefited the colonial 'vampire' state. As Rhodes (2010: 9) points out, East Africans, of course, were not simply drawn into this economic world system but were also cast in an explicitly peripheral role: supplier of raw materials. The unequal relationships forged between Africa and Europe under colonialism have had long-term economic and political consequences (Rodney 1972). Rhodes argues that contemporary globalization in Africa is a process deeply connected to colonial-era abuses (Rhodes 2010: 201). The spatial organization of the broader colonial landscape helps us better understand the beginnings of extractive practices that, in many cases, continue today.

Additionally, as case studies in nineteenth-century Africa demonstrate, globalization may also affect people's understandings of space on a smaller scale. Recent landscape studies have shown how European architecture and use of space affected indigenous people's interaction with and understanding of the landscapes in which they lived. In the nineteenth century, not only colonialism but also capitalism and increasing urbanity transformed African landscapes (Rhodes 2010: 11). Attention to architecture and landscape helps push our analysis of global culture beyond ceramics, beads, and other European imports to a truly practice-based approach.

Europeans first demonstrated their dominion by mapping and naming African territory (Hall 2000: 116). When later establishing outposts, some colonialists appropriated previously sacred locales and fundamentally altered the meaning of these places through their occupation (e.g. Apoh 2013). In other cases, colonialists built outposts at previously unoccupied sites. Lord Frederick Lugard established an administrative headquarters for the Northern Protectorate of Nigeria at Zungeru in 1902 – a site that was previously bush land (Ogedengbe 1998: 284). The construction of Zungeru was a considerable undertaking; the outpost included a prison, a hospital, a church, an armoury, and a cemetery. All structures excluding the prison were raised on cement pillars to improve ventilation, many structures had wooden walls, and at least Lugard's residence had glass windows (Ogedengbe 1998: 291). With church and hospital on site, the Zungeru settlement brings to mind a little Britain – civilized and self-contained. The sharp distinctions between European architecture at Zungeru and that at nearby indigenous settlements would have helped Zungeru residents emphasize their social distance from their African neighbours.

Colonialists' expressions of difference and power at Zungeru are evident not only in the architectural form of Lugard's residence, but also in its elevation and size. Lugard's house was 39 x 18 metres in size (larger than the hospital), situated on a hill, and raised by pillars to enable ventilation. An arched gate marked the 200-metre road leading to the residence and would have restricted access to it. Directly before the house, several 'round huts' clustered – situated there apparently to house 'local chiefs visiting Lord Lugard' (Ogedengbe 1998: 288). The size, elevation, gating, and elaborate construction of Lugard's residence are clear material statements about the power and status of Lugard specifically, and British colonialists more generally (Figure 2.5.3). Particularly telling are the 'round huts', constructed by the British for use by indigenous leaders visiting the administrative centre. These structures' architectural style, low elevation, and small size were surely meant to represent and reinforce Africans' – even elite Africans' – comparatively low social standing. Through European architecture and control of space, colonialists at Zungeru underlined the difference separating them from their subjects.

While colonialists often attempted to express their presumed superiority through material difference (as at Zungeru or South Africa's Halfway House), Africans sometimes used European objects and architecture strategically to disrupt colonialist assumptions of their inferiority and 'otherness' (as at Gorée Island or the Todzi site in Ghana). Thus, colonialist power structures must inform our analyses of global culture in nineteenth-century Africa. The process by which shared cultural sensibilities developed between Africa and other world regions was fraught with power plays, conflict, and negotiation (see Tsing 2005).

Echoing some of the insights of Ogedengbe (1998), Rhodes (2011) analysed European architecture and landscape in Suakin, Sudan, which became a major British colonial port on the

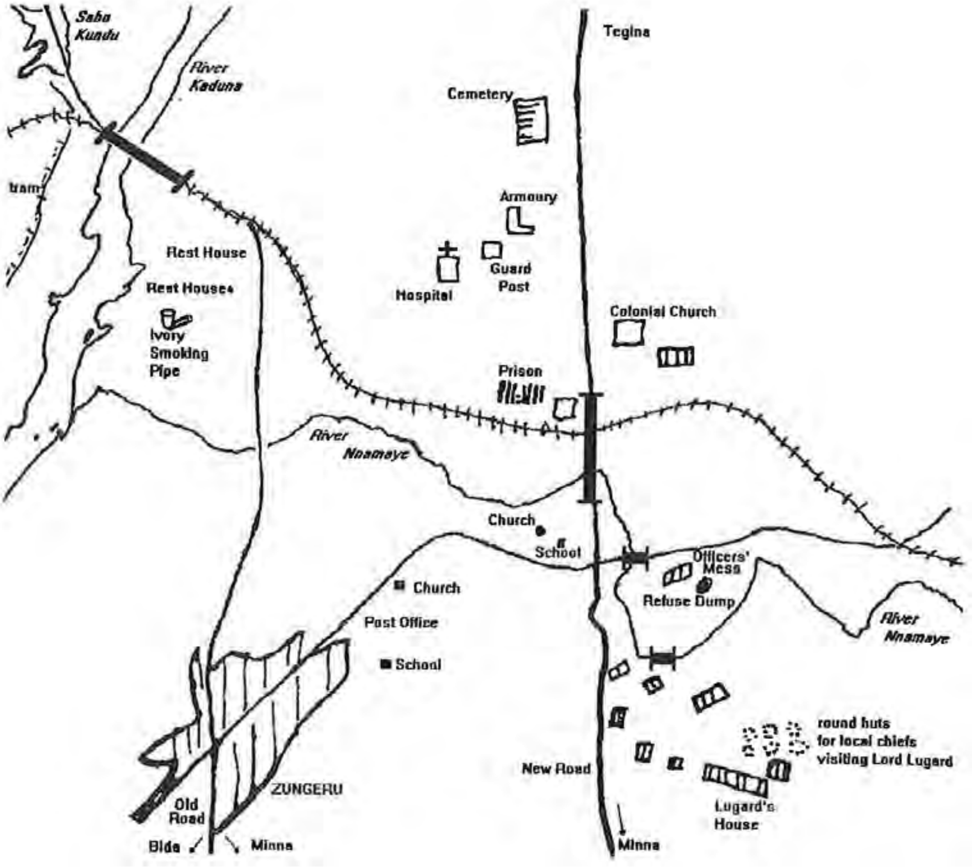

Figure 2.5.3 Map of Zungeru, Nigeria. Courtesy of and copyright held by Kit Wesler

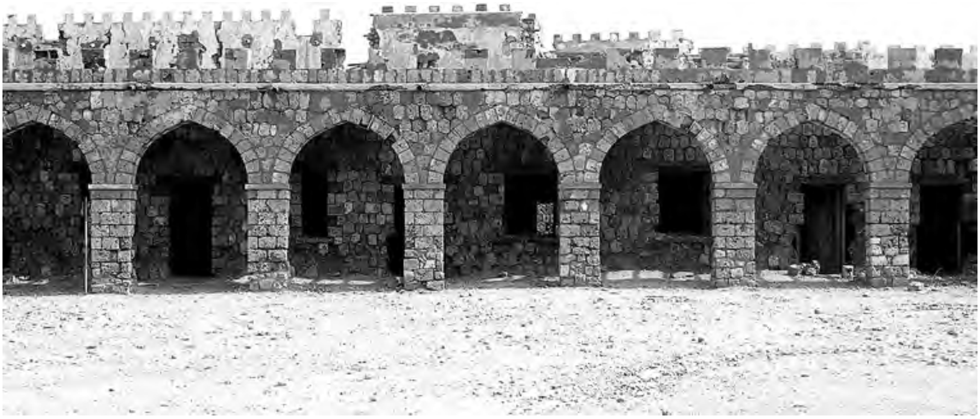

Figure 2.5.4 'Eastern'-style arches of the south-western warehouse in the Customs Complex, Suakin, Sudan. Courtesy of and copyright held by Daniel Rhodes

Red Sea in the 1880s. Colonialists at Suakin built part of the Customs Complex in a distinctly non-European style. Like the 'round huts' at Zungeru (Ogedengbe 1998: 288), the south-western part of the Customs Complex at Suakin is marked for use by non-Europeans through its distinctive architecture. In the Complex's south-western area, warehouses had arched doorways and rectangular pillars; these architectural details reflect an 'Eastern' aesthetic as understood by British colonialists (Figure 2.5.4). These warehouses were likely reserved for use by local commercial traders. Suakin's 'Eastern-style' warehouses thus accomplished two goals for the colonialists: first, they marked designated indigenous spaces – and thus indigenous people – as different and, second, they spatially segregated them (Rhodes 2011: 171). In turn, European architecture at Suakin established specifically European spaces for British colonialists at the Customs Complex. British domestication of Suakin's landscape extended beyond the customs buildings themselves: archaeological evidence strongly suggests that a decorative garden was planted adjacent to the complex in the late nineteenth century (Rhodes 2011: 174). Decorative gardens are common in European colonial settings around the globe. At Suakin, as elsewhere, gardens helped colonialists to domesticate and claim control over an unfamiliar and alien place (Rhodes 2011: 175–76).

While Rhodes's study in Sudan provides an impressive insight into how the British created a specifically European space at Suakin, it provides scant attention to how Africans' perceptions of the landscape at Suakin would have changed – an interpretive lacuna that Rhodes (2011: 187) himself recognizes. In the Dwars Valley, South Africa, Lucas (2004) suggests that tightening colonial territorial control would have affected indigenous and enslaved peoples' understanding and use of the landscape. He argues that unregulated territory between colonial farms and the wilds beyond colonial control would have been important spaces for enslaved people. As the colonial landscape changed, former European places might be re-appropriated for subaltern people's own ends. For example, Lucas suggests that the silver mine shafts and structures on Simonsberg Mountain in the Dwars Valley might have been periodically re-occupied by enslaved people after their abandonment by colonialists in the early nineteenth century (Lucas 2004: 140–41). Thus, what was a 'European' space versus what was an 'indigenous' space was changeable and changing.

Just as Africans often localized European goods, so too did they domesticate European architecture. At Elmina, a major European port on Ghana's Gold Coast, DeCorse (2001) complicates our understanding of what constitutes a 'European' house. Archaeological research shows that African residents built multi-storied houses in the European style. Yet, the arrangement of domestic space, typically 'a linear arrangement of small rooms around a central courtyard' (DeCorse 2001: 177) remained fundamentally African. That is, Africans at Elmina adopted European architecture (perhaps as a statement of status) while retaining an indigenous conception of domestic space. This localization of European-style houses in an African spatial arrangement aligns with DeCorse's arguments on the use of imported objects at the site. While resident Africans at Elmina apparently promiscuously adopted European material goods, they nonetheless maintained a fundamentally indigenous worldview in their use of those goods (DeCorse 2001: 175). These case studies reinforce yet again the central importance of localization in the globalization process.

A post-colonial archaeology of colonialism?

European imperialism facilitated denser inter-regional connections and a greater sense of global unicity in nineteenth-century Africa. And both colonialism and globalization on the continent are deeply linked to the development of our 'modern world' (Hall 2000). Archaeology has much to contribute to our understanding of the beginning of modernity. Yet, the concerns that some archaeologists raise about an overemphasis on Europeans in Africa's recent past are serious and valid (Schmidt and Walz 2007a, 2007b). This chapter's concluding section considers the promise of post-colonial approaches to the archaeology of colonialism. Specifically, I emphasize the importance of understanding globalization as a long-standing process in Africa, using oral histories to their full interpretive potential, recognizing hybridity, and acknowledging archaeology's colonialist heritage.

As other chapters in this volume demonstrate, globalization is far from a new phenomenon in Africa. Globalizations connected many regions within and outside of the continent long before the European imperialist period. Colonialists (and, indeed, early anthropologists) often saw the indigenous people they encountered in Africa as isolated and culturally stagnant (Richard 2012: 85). How flawed the 'isolated primitive' interpretation was, has been clear to academics for quite some time (e.g. Piot 1999). While mobile, egalitarian hunter-gathers and sedentary, socially stratified kingdoms in Africa differed in their inter-regional connections (Swanepoel 2013: 975), none lacked ties to other groups. Indeed, human groups have never lived in isolation. While European colonialism in Africa is implicated in the birth of modernity, the globalizations that came with imperialism built on earlier inter-regional connections and global cultures (Mitchell 2005).

Oral histories are another tool that may help decentre Europeans from histories of Africa's colonial past. Interpretations that foreground oral histories help to privilege African voices and understandings about past events (Croucher 2010: 34). Archaeological and oral historical data's intersections and divergences enable more sophisticated and textured interpretations of the past (e.g. Helm 2004; Wynne-Jones 2015). Another important tool for the post-colonial archaeology of colonialism in Africa is the recognition of cultural hybridity – and especially the localization of global ideas and goods. The idea of 'cultural imperialism' (Tomlinson 1999: 79), under which indigenous cultures were replaced wholesale with European lifeways, has been rightly critiqued in recent decades. Archaeology is particularly useful in helping us understand how Africans' strategically adopted pieces of colonialists' cultural repertoire for their own ends.

While the beginning of archaeology in Africa is itself rooted in colonialist enterprise, the field now has much to contribute to the analysis of globalization and imperialism. Public interest remains high in many colonial-era sites in Africa (Croucher 2013: 1019). And, for many post-colonial states in Africa, histories of European colonialism – particularly colonial violence – have served a key role in the politics of nation-building (Richard 2010: 5). How we remember Africa's past clearly matters for its present (Hall 1988: 62). Africans' selective adoption of foreign goods and architecture under colonialism helps us understand how European culture was transformed and domesticated – that is, how a new conception of 'local' arose, one more closely attuned to outside cultural currents in a suddenly smaller world.

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2.6

Global frictions, archaeological heritage, and Chinese construction in Africa

Paul J. Lane, Cornelia Kleinitz and Yongliang Gao

Introduction

Two things can be said about globalization with some certainty, and on which all commentators appear to agree. The first of these is that globalization is ongoing, and in some parts of the world the processes of globalization are both effecting *and* affecting cultural, economic, and environmental change at such an accelerating rate that the term hyper-globalization is often used to describe these conditions. The second is that even in such contexts, not everything 'goes to plan'. By this we mean that, while globalizing processes are recognizable because of certain shared commonalities, such as time–space compression, standardization, and de-territorialization, thereby making it possible to make a case for the identification of older episodes of globalization around the world (e.g. Jennings, this volume), neither the consequences of globalization nor local and regional responses to these processes are uniform. Such context- and historically specific reactions to, and accommodations of, globalizing processes are now commonly glossed in the scholarly and more popular literature as 'glocalization' (Robertson 1995; Roudometof 2016), and there is a growing body of scholarly literature on these kinds of dialectical and recursive relationships between universalizing and particularizing tendencies in a variety of settings, including Africa and China (e.g. Mensah 2006; Hahn 2008; Wu 2008; Nederveen Pieterse 2015).

In her historical and ethnographic dissection of the processes, consequences, and narratives of deforestation in Indonesia, especially over the last 30 years of the twentieth century, the anthropologist Anna Tsing uses the notion of friction as a framing device and analytical tool for understanding how globalization is brought to life through the conjuncture of 'universals and particulars' (Tsing 2005: 4). Friction, the entangled rubbing together of people and things, people and people, things and things (Hodder 2012), creates heat and discord, but at the same time energy and warmth, fuelling – both literally and metaphorically – life itself. Deforestation is a particularly apt topic through which to explore the ambivalences of friction, and by extension also globalization – 'the grip of worldly encounters' as Tsing (2005: 1) describes it. Humans have been cutting down trees for millennia, clearing land for crops and to encourage vegetation regrowth for their livestock and wild prey, opening spaces for dwelling and using the products of that activity for constructing new enclosed spaces in the form of tents and houses, towns and villages, fortifications and factories. These, in turn, all create new frictions and more deforestation as demands for fuel for warmth, cooking, and industry escalate alongside humanity's desires for more of everything.

Today, the emissions and residues of those activities and desires are at the heart of debates over the future of the Earth, with questions raised about whether, how, and in what ways planetary boundaries have been passed (Hughes *et al.* 2013); when humanity set these trends in motion (e.g. Ruddiman 2003; Ellis *et al.* 2013); whether we are now living in a new geological epoch – the Anthropocene – as a consequence (e.g. Waters *et al.* 2014; Hamilton *et al.* 2015); and, if so, who should be held responsible (Sayre 2012; Malm and Hornborg 2014). Reflecting on such debates, and taking an extreme view, it could be argued that globalization is simply part of the human condition, something that has been with our species at least since *Homo sapiens* first evolved on the African continent, and since then we have been leaving the traces of globalization – initially mostly genetic ones, but quickly material and biophysical ones as well – in our wake ever since, irrevocably changing the world as a consequence (e.g. Sandom *et al.* 2014; O'Connell and Allen 2015). A narrower perspective sees globalization as episodic, spurts of activity that collectively increased connectivity, the flow of raw materials and commodities, and exchanges of beliefs, ideas, and ideologies, that were followed by an ebbing of energy, fragmentation and the breakdown of systemic centre–periphery relations (Tomlinson 1999; LaBianca and Scham 2010). Each iteration of globalizing forces, nonetheless, had future cumulative consequences for subsequent globalizing pulses around the world, and each opened up pathways to alternative futures. These were both literal ones, such as those forged along the terrestrial Silk Roads from China through Central Asia to Byzantium, the Mediterranean and Viking Scandinavia (Mair & Hickman 2014) and the maritime routes that linked Asia with Africa (Kusimba this volume), and more metaphorical ones, that simultaneously enabled further globalizing tendencies but also directed these toward certain places and away from others. Reconstructing these requires concerted route/root work, involving careful scrutiny of different sources and different *kinds* of sources for their selective absences and presences, their 'silences' and 'mentions', to use Michel-Rolph Trouillot's (1995: 22–30) terms, exposing not just the ancestry of particular connections and disconnections (e.g. Stahl 2010), but also their specific frictions.

Most of the other contributors to this section explore the archaeological evidence for such frictions at different times in the past across the African continent and beyond, exposing in particular the mobilizing capacities of material culture (Versluys this volume; Verne this volume), or at least certain specific material cultures, in such processes. Like other contributors to this book, they also examine the analytical frictions that concepts such as 'globalization' and 'ancient globalization' introduce to the interpretative process and what the broader ramifications might be, both philosophically and more pragmatically, from their use and from the identification (Marshall this volume) or otherwise (MacEachern this volume) of past phases of globalization in different parts of the continent. Here, we reverse the direction of this particular academic gaze away from the past toward the present day and perhaps, also, the future.

More specifically, we outline in this chapter some of the consequences the rapid globalization of Chinese economic power over the past couple of decades has had on Africa's archaeological heritage and offer some suggestions as to how some of these might be ameliorated. To provide some context for the following discussion, we begin with a brief synopsis of how infrastructure and other large-scale development projects are financed in China, and what legislation exists to mitigate such threats and offset the physical loss of cultural heritage as a consequence of rapid economic development. We then consider the changing relations between African countries and China over the last few decades and how this has led to the very rapid expansion of building and mining activity on the African continent. Some of the ramifications of these trends are then examined, focusing on how global principles of archaeological impact assessment, mitigation, and preservation are played out in the context of rapid, local, globalization and some of the frictions that ensue.

Chinese archaeological heritage management

From 1949 to the 1970s, China was one of the world's poorest countries, and the government's priorities were on introducing radical ideological reforms aimed at paving the way for socialist development and widespread poverty reduction. New administrative and legislative systems were put in place, including measures aimed at the protection of archaeological and architectural heritage, which mostly fell under the auspices of the Ministry of Culture. Up to the mid-1960s, however, conservation measures were generally limited to protecting recognized historic sites and monuments (Whitehand and Gu 2007: 646). As a consequence, the pressure to expand and improve the nation's economic base resulted in significant destruction of undocumented sites, although there were also several important early rescue excavations, such as Banpo, a Neolithic village in the Yellow River Valley (Shaanxi Province). The destruction of sites intensified during the Great Proletarian Cultural Revolution (*c.*1966–1976), when a vast number of construction projects were embarked upon. Wong's (2003: 203) observation that almost 90,000 small hydroelectric stations and nearly 800,000 new industrial enterprises were established during the Cultural Revolution gives an indication of the scale of this activity. Unsurprisingly, a large number of older buildings, including those at identified 'historic sites', were torn down nationwide (Whitehand and Gu 2007: 647; Gruber 2007: 272–73). This was partly to make way for infrastructural improvements and industrial development, but also because in the prevailing political context, historic relics were seen as vestiges of feudalism that needed to be stripped away as they violated socialist ideals. Nonetheless, even at the height of the Cultural Revolution several major sites were investigated, including Ming dynasty royal tombs in Sichuan and the Han dynasty princely tombs at Mancheng, Hebei (Wang 2011: 48).

With growing press freedom in the 1980s and 1990s, elements of the Chinese media began to reflect on these losses of cultural heritage and to criticize the heritage vandalism of the 1960s –1970s, awakening wider public awareness of the importance of heritage protection. As a reaction to growing public concerns, the National People's Congress (NPC) began developing heritage protection legislation (Gruber 2007; Lee 2014: 17–27). In 1982, the NPC promulgated *The Law of the People's Republic of China on Protection of Cultural Relics* (Peoples Republic of China 2007; hereafter Cultural Relics Law). Comprising eight chapters covering 33 articles, ranging from 'General provisions' to 'Archaeological excavations' and 'Taking cultural objects out of the PRC' (Huo 2015), this was introduced with the aim to harmonize economic growth and heritage conservation. As part of this change in policy, in 1986 the concept of historical-cultural conservation (*lishi wenhua baohuqu*) was adopted to 'reduce the conflict between conservation and redevelopment' in urban centres (Whitehand and Gu 2007: 648).

Despite such legal and policy provisions, economic imperatives and concerns remained supreme during the 1980s and 1990s, to the detriment of heritage protection, and 'heritage vandalism' in the name of development was omnipresent in China before the 2000s. This was partly due to inherent weaknesses in the Cultural Relics Law, especially the 'lack of jurisdictional rules and . . . inconsistencies between national government and regional municipalities' (Maus 2009: 411). Such heritage vandalism, whether arising from looting of archaeological sites or the destruction of archaeological and architectural heritage as a consequence of development projects, remains an issue of concern to this day (see examples cited by Maus 2009 and Huo 2015).

From the mid-2000s onward, however, the State Administration of Cultural Heritage, a national department that regulates China's archaeological heritage management, has begun to empower local archaeology authorities with the tasks of heritage management. The first significant step was the passage of an Amendment to the Cultural Relics Law in 2002. Article Ten of the 2002 Amendment, in particular, stated that:

> People's governments at or above the county level shall incorporate the undertaking of the protection of cultural relics into their own plans for national economic and social development and the expenses entailed shall be listed in their own budgets. Budgetary appropriations made by the State for the protection of cultural relics shall increase along with the increase of revenues.

Following the 2002 Amendment, 'cultural heritage sites protected under this law [were] classified under three different levels of protection according to their historical and cultural value' and the protection could be at either county, provincial, or national level (Gruber 2007: 274). This has resulted in a massive upsurge in 'rescue/salvage' archaeology projects, generating a wealth of new data (Li *et al.* 2016). Most of these projects are undertaken by local teams based at the prefecture, municipality, or town Cultural Relics Bureau associated with the area in which the project occurs (Zan 2014: 106). However, despite the new provisions, the 2002 Amendment neither guaranteed the source of funding for archaeological mitigation work nor for cultural heritage protection (Maus 2009: 418).

The penalties for damaging or destroying archaeological sites and monuments were also set very low in the 2002 Amendment, and easily offset by the profits that could accrue from a development project. Article 66, for instance, stipulated that anyone undertaking construction activity at a protected site who failed to carry out mitigation work or otherwise conserve the remains would be liable to a fine of at least 50,000 Yuan but no more than 500,000 Yuan (*c.* US$60,250 at 2002 rates). The fine could be imposed by local government if the damage caused was considered 'serious' (Huo 2015: 7). Since the majority of sites were not protected under law, and the level of fine was left to the discretion of local government officials, such provisions proved relatively inconsequential. Weak or inadequate planning organization at the county and provincial level also contributed to the limited effectiveness of heritage protection, and the high level of decentralization of the heritage field continues to work against effective enforcement of the law (Zan 2014: 106).

In a further step to improve archaeological site protection, the State Cultural Relics Bureau (SCRB) introduced in 2004 the idea of archaeological investigation for pre-development before infrastructure construction (China News Online 2013). The SCRB has since established the criteria and guidelines that all other city and provincial Cultural Relics Bureaus in China need to follow regarding consideration of archaeology in infrastructure projects. Consequently, archaeological investigation has become a routine procedure before any infrastructure projects can be legally carried out in China. This has been partly helped by two further amendments to the 1982 Cultural Relics Law in 2007 and 2013 (see Maus 2009; Huo 2015). Transformation of Public Sector Units (*shiye danwei*), fiscal reform, and growing professionalism within the discipline have further contributed to a strengthening of cultural heritage protection in China (Zan 2014). Changes to the mechanisms for financing infrastructure projects have also contributed, as we briefly elaborate.

Infrastructure projects in China concern generally six fields relating to residential and commercial development, and the energy, transportation, hydrology, and communication sectors. From the 1980s onward, the ways of funding infrastructure projects in China have become increasingly diverse (Figure 2.6.1).

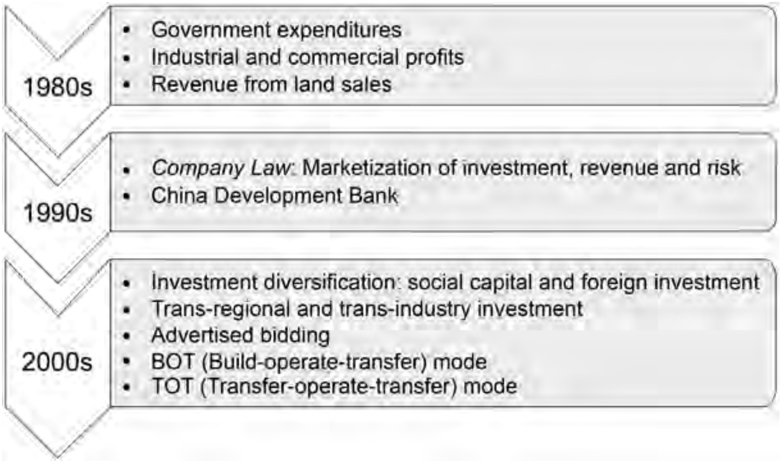
1980s
Government expenditures
Industrial and commercial profits
Revenue from land sales
1990s
Company Law: Marketization of investment, revenue and risk
China Development Bank
2000s
Investment diversification: social capital and foreign investment
Trans-regional and trans-industry investment
Advertised bidding
BOT (Build-operate-transfer) mode
TOT (Transfer-operate-transfer) mode

Figure 2.6.1 Infrastructure project funding in China, 1980s–2000s

Prior to Chinese economic reform in 1978, infrastructure projects were largely funded by central or local governments. Thereafter, although government financing has continued to play a central role in infrastructure funding, additional funding channels have been added. One of which has been the use of a proportion of the profits from industrial and commercial enterprises, and since 1984 hundreds of cities in China have taken a 5 per cent tax on the profits of local industrial and commercial firms for their upkeep, and especially public facility maintenance. Another common funding means is to use part of the revenue from land sales. This has been used mainly to help complete ancillary facilities in urban areas, although Chinese citizens have long complained about this means of financing infrastructure, as it is open to manipulation in a manner that drives up the cost of real estate and housing prices.

In 1993, the Standing Committee of the National People's Congress enacted *The Company Law of the People's Republic of China* (hereafter the Company Law). According to the Company Law, every infrastructure project must elect a project entity, whose responsibility must be clearly defined and the process of investment, revenue and risk of the project must be put out to tender (People's Republic of China 2005). Introduction of the Company Law, marked the commencement of the commercialization of infrastructure projects. This was consolidated in 1994, with the founding of the China Development Bank (CDB), and henceforth the CDB has been the foremost capital source for financing China's infrastructure projects.

Since the early 2000s, more and more investors have been allowed to participate in China's project funding, through such mechanisms as social capital, foreign investment from proprietorship, and joint venture initiatives. Notably, foreign companies and individuals can invest their capital more widely than was the case under previous regulatory frameworks. Currently, the primary means of funding infrastructure projects in China are either via advertised bidding, or through build-operate-transfer (BOT) or transfer-operate-transfer (TOT) modes. Advertised bidding usually applies to residential buildings or transportation construction in cities. Additionally, infrastructure projects can now receive funding through trans-regional and trans-industry channels, although these still count for a fairly small proportion of China's total project funding. Additional laws, such as *The Construction Law of the People's Republic of China* and *The Regulation on the Implementation of the Bidding Law* (hereafter, the Bidding Law (People's Republic of China 2001)), have also helped standardized the advertised bidding procedure (Figure 2.6.2).

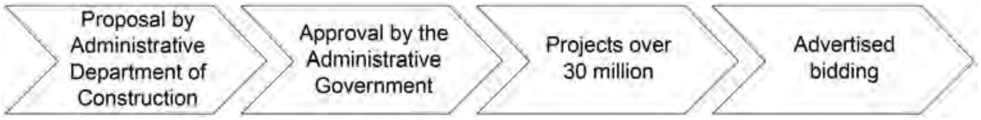
Proposal by Administrative Department of Construction
Approval by the Administrative Government
Projects over 30 million
Advertised bidding

Figure 2.6.2 Procedure of advertised bidding for infrastructure projects in China

According to the Bidding Law, every infrastructure project must first be proposed by a provincial, autonomous or municipal Administrative Department of Construction (which all fall under the Ministry of Administrative Government), except those proposed by the central government. Once the project has been examined and approved by the Ministry of Administrative Government, the relevant auditing department will estimate the cost of the project. If the project is valued at over 30 million Yuan, it must go through the advertised bidding process. The Administrative Department of Construction monitors this bidding activity, rather than an independent entity. A possible weakness in this process is that leaving this task in the hands of a government body, rather than an independent one, can result in corrupt advertised bidding aimed at circumventing certain legal provisions, such as requirements for pre-development archaeology, in order to reduce project costs (China State Construction 2015).

In principle, all of these funding mechanisms should include provision for pre-development assessments and mitigation work, as required under Article 10, and also Articles 30–32 of the 2002 Amended Cultural Relics Law, which stipulate that 'before any construction can start a preliminary archaeological inspection has to be undertaken by the local administration' (i.e. the local SCRB excavation unit), and that any further mitigation work (such as rescue/salvage excavation) if required has to be funded by the construction company (Zan 2014: 106). These have resulted in a massive increase in pre-development archaeology projects undertaken to very high professional standards, often resulting in spectacular discoveries, the cumulative effects of which are transforming our understanding of China's archaeological past (Li *et al.* 2016). However, institutional fragmentation and the lack of clearly defined responsibilities reduce the effectiveness of these legal provisions. The lack of budget provision for post-excavation and analysis is a further weakness, so while sites may be excavated, except for the most significant discoveries the results are poorly disseminated, if ever (Zan 2014: 107). Consequently, although:

> the central Chinese authorities have realized the importance of environmental sustainability, such aims must face the needs and realities of China's very high rate of economic growth and its consequences. The old parts of major cities are disappearing and being replaced by modern housing areas, and numerous heritage sites are being destroyed by construction projects.
>
> *(Gruber 2007: 255)*

The different mechanisms for funding infrastructure projects in China are also increasingly used to finance large-scale infrastructure development and also mining and drilling operations in other parts of the world, especially sub-Saharan Africa. While such globalizing activity is undoubtedly having some economic benefits for various African countries, notably, the Sudan, Ethiopia, Kenya, Tanzania, Mozambique, Zambia, Angola, and Nigeria, the scale of development activity is also putting a strain on local heritage services and is generating, in particular, considerable friction at the community level as Sino-African relations enter a new era of intensive contact and interaction. What is lacking is any mechanism to ensure that Chinese companies and funded projects undertake the pre-development archaeological work they would be required by law to do if operating in China, when these projects take place in Africa.

Changing relations between China and Africa

There has been contact between China and parts of Africa, especially the East African coast, for over 500 years (Kusimba, this volume), although these undoubtedly ebbed and flowed over the centuries. Since the founding of the People's Republic of China in 1949, political and financial ties have intensified and broadened in geographical scope and, in the last two decades, have become increasingly important to the economic development of a great many countries across the African continent (Larkin 1973; Shelton 2001). During the era of the Cold War (*c.*1947–1991), economic assistance along with military and technical support was tied very closely to political orientation, especially following the April 1955 Asian–African Bandung conference (Muekalia 2004), which particularly benefitted those African states with overtly socialist, one-party governments. As part of these strategic alliances, some large-scale infrastructure developments were undertaken, of which the Tanzania and Zambia Railway (Tanzam, also known as TAZARA) built between 1970 and 1975 (following a two-year survey) and covering 1,865 km, was by far the largest (Gleave 1992; Monson 2013).

Economic reforms and trade liberalization initiated within China after 1978, and especially since the start of the twenty-first century, have transformed these relations. China's economy, in particular, has grown at a remarkable rate, with per capita Gross Domestic Product (GDP) accelerating at over 8 per cent per annum between 1978 and 2007 (Zhu 2012), although this has twice fallen to below 7 per cent since 2009 as a consequence of diverse internal and global economic factors (Farrer 2015). This economic expansion has been accompanied by China's re-emergence as a global power, not just in terms of its influence on markets, but also from the perspectives of its political and cultural influence. As part of this trend, the Chinese state has significantly increased the proportion of its annual budget allocated to foreign aid. Specifically, whereas the cumulative total national expenditure on foreign aid between 1949 and 2009 was around 256.29 billion Yuan (approximately US$43 billion at 2009 exchange rates), between 2010 and 2012 foreign aid expenditure ran to 89.34 billion Yuan (Sun 2015). Much of this has been directed toward financing large-scale infrastructure projects, mines, and dams across Africa (Foster *et al.* 2009), especially since 1999 when the PRC adopted its 'go out' (*zou ququ*) policy. Chinese financial investment on the continent also increased substantially over the same period, and Chinese-owned and -managed companies and businesses, from local supermarkets and tour operators to large state-owned construction companies and utilities, are becoming increasingly common (Gill and Reilly 2007). The value of China's trade with Africa has also escalated rapidly, rising from around US$2 billion in 1999 to US$39.7 billion in 2005, and an estimated US$200 billion in 2013 (Taylor 2006; Anthony 2013).

These trends have contributed to the revival of national economies and local industry, helping to stimulate growth across the continent, especially since the turn of the twenty-first century (Vines 2006). Although welcomed in some quarters, the rate, scale, and nature of Chinese investment has raised considerable disquiet among many Africans and external observers in the West (Hess and Aidoo 2015). Some of these concerns may well be misplaced, emanating from a misunderstanding of the underlying philosophy that guides Chinese overseas development and its foreign aid policy (Chan 2013), a misrepresentation of these (Mawdsley 2008), and/or from narrow reactionary ideological concerns (Rotberg 2008; Chari 2015). However, like any global and globalizing power, past or present, these interventions are far from being entirely benign, and can be shown to affect certain sections of society and the environment in quite detrimental ways, as explored below.

Heritage frictions in sub-Saharan Africa

The scale of China's investment in construction and extraction projects across Africa is phenomenal, and ongoing, despite the recent slowing down of China's economy since 2014. In 2012, for example, the then President, Hu Jintao, pledged US$20 billion in loans to Africa, doubling previous promises (Farrer 2015). In December 2015, China's current President, Xi Jinping, announced a further US$60 billion package of support in the form of interest free loans to governments and direct assistance (BBC News Online, 4 December 2015). Research by China.aiddata.org, an online, collaborative platform that monitors and documents information about financial flows from China to Africa, suggests that in late 2015 there were at least 3,030 active Chinese-financed or co-financed development projects. Earlier in the year, news agencies also reported that China had completed some 1,046 projects and laid 3,350 km of roads and 2,233 km of railway tracks since the recent upsurge in support (Farrer 2015). Table 2.6.1 lists some of the largest projects that are ongoing, and Figure 2.6.3 shows the number of active projects with Chinese finance across the continent.

Table 2.6.1 Examples of current major development projects in sub-Saharan Africa with Chinese financial backing

Country	*Level of financing (USD 2009)*	*Date of contract signing or announcement*	*Project*	*Financer and details*
South Africa	US$7 billion	Ongoing	Mini-city	Shanghai Zendai property group; 1,600 ha. development at Modderfontein
Regional	US$4.34	2015	Cement plants	Sinoma International Engineering Co.; cement plants in Cameroon, Ethiopia, Kenya, Mali, Niger, Nigeria, Senegal and Zambia
Zimbabwe	US$1.5 billion	2015	Thermal power plant	China State Construction Engineering Corporation; 600-megawatt thermal power plant
Kenya	US$3.4 billion	2015	Kenya standard-gauge railway	90% loan from Exim Bank; standard gauge railway Mombasa-Nairobi and new terminals.
Nigeria	US$12 billion	2014	Coastal railway	China Railway Construction Corp; railway will stretch for 1,402 km linking Lagos and Calabar

Chad	US$5.6 billion	2014	Cameroon–Chad–Sudan railway	China Civil Engineering Construction Corporation; 1,344 km railway network from Cameroon border via N'Djamena to border with Sudan
Tanzania	US$1.03 billion	2012	Gas pipeline	Exim Bank; over 500 km gas pipeline between Mtwara and Dar es Salaam
DR Congo	US$9 billion, later reduced to $6 billion	2007	Infrastructure for mines	Exim Bank; improve infrastructure and develop mines (esp. copper and cobalt) in Mashamba & Dima basins, Kolwezi and Dik Colline D syncline
Sudan	US$1.38 billion	2007	Railway	China Railway Engineering Group Co. and Transtech Engineering Corp.; 726 km railway from Port Sudan to Khartoum
Nigeria	US$8.3 billion	2006	Lagos–Kano railway	China Civil and Engineering Construction Company; 1,124 km standard gauge railway; 186 km completed by end 2014.
Mozambique	$3.1 billion	2006	Dam and hydro-electric plant	Exim Bank; Mepanda Nkua dam on Zambezi, and hydroelectric plant

The scale and number of these development projects, and the speed with which they are being implemented, and hence the likelihood of massive destruction of sites and monuments without any kind of pre-development documentation, have caught the Africanist archaeological community off guard. Some expatriate Africanist archaeologists seem either unaware of the extent to which Africa's economic landscape is changing as a result, or are simply ignoring the issue. There has certainly been minimal discussion of the issues at professional meetings, with the exception perhaps of the escalating rate at which large dams for supplying hydroelectric power and water for intensive irrigated agriculture are being built across the continent. Nonetheless, African archaeologists, and some international teams, have done their best to mitigate some of the effects of this growth in infrastructure, mining, and urban renewal projects, undertaking pre-development impact assessments and rescue excavations at a sample of sites when funding has been available. Precise details of just how much commercial archaeology is currently ongoing on the continent is not clear, however. Another unknown is just how much of this work relates to Chinese-funded projects, since Western, Middle Eastern, and other Asian companies are also increasingly active across the continent, especially in the fields of oil and gas prospection, and commercial irrigation agriculture. As Scott MacEachern (2010) experienced, such corporations may often have quite different ways of 'seeing' heritage compared to archaeologists, even though some are now taking more responsibility for funding pre-development archaeological mitigation (Naffé *et al.* 2008; Arazi 2009, 2011). This is partly as a result of international pressure

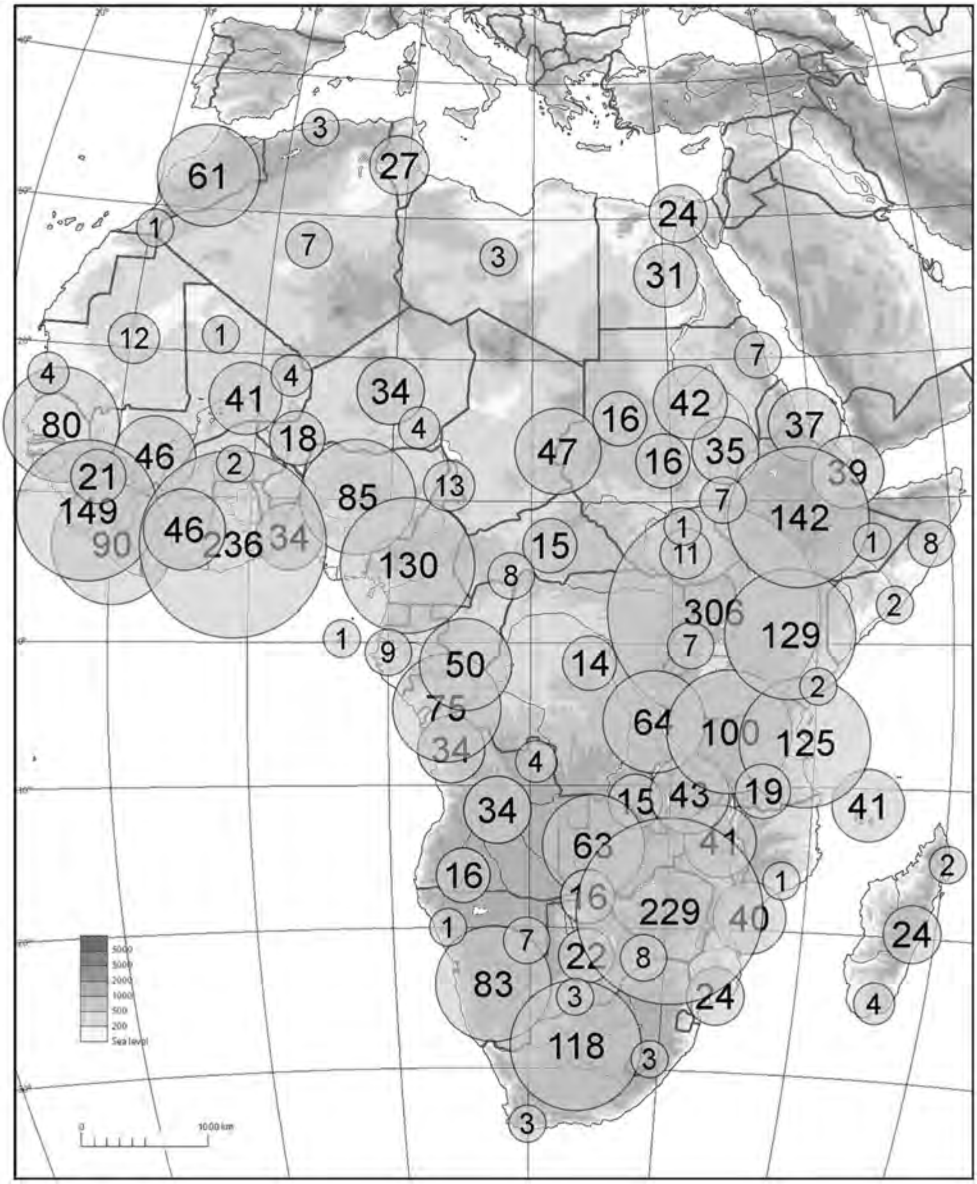

Figure 2.6.3 Distribution of current development projects in Africa funded from Chinese sources (Source: Dreher *et al.* 2014, and Strange *et al.* forthcoming)

on these companies and on donor agencies such as the World Bank and the European Union to comply with the legislations that govern their activities 'at home', and partly due to an increased desire within these bodies to project more culturally and environmentally sensitive images of corporate responsibility.

Nonetheless, multiple frictions remain, and these cut across several domains. Some relate to the unevenness in heritage legislation across the continent, especially as this relates to pre-development, commercial archaeology, and a corresponding unevenness in the necessary expertise, capacity, and regulatory structures for such work. Some countries, such as Botswana and South Africa (see Naffé *et al.* 2008, for other examples), have operated systems of pre-development archaeology based on the 'polluter pays' model for several decades, and while these are far from perfect (e.g. Chikure 2014), mechanisms at least exist for a degree of mitigation of these threats, not all of which, of course, come solely from the influx of Chinese finances (e.g. Samuels 2009; Benett and Barker 2011; Lane 2011). Where these systems are weaker, the scale of undocumented destruction of archaeological sites and monuments is understandably much higher.

Problematic though such issues are, and without negating the growing urgency for Africa's archaeological communities to take steps to address them, more disconcerting frictions arise when global heritage concepts centred on notions of 'universal value' and 'stewardship for the future' become aligned, however inadvertently, with corporate and state interests in the cause of 'progress' and 'development' without sufficient regard for local sensibilities and the social and cultural consequences of globalization. This became particularly apparent in the Sudan during construction of the Merowe Dam on the Fourth Nile Cataract between the late 1990s, when pre-development archaeological work commenced, and the dam's completion in 2008. Similar frictions subsequently resurfaced in June 2007 following the revival of plans for building the Kajbar Dam on the Third Cataract. Given the announcement in November 2015 of Saudi Arabia's commitment of US$1.7 billion toward the construction of three new dams in Sudan over the coming decade (Sudan Tribune Online 2015), they are also likely to continue to haunt Sudanese archaeology well into the future.

The backstory to the construction of the Merowe Dam, the launch of an international campaign for salvaging the archaeological heritage of the area to be flooded (which prior to this work was almost an archaeological *terra incognita*), and the subsequent events are described in detail elsewhere (Hafsaas-Tsakos 2011; Kleinitz and Näser 2011, 2013; Kleinitz 2013). As these authors note, measuring over 9 km in length and 67 m high, when first proposed the Merowe Dam was set to become the highest in the world – a physical construction of truly global significance (Figures 2.6.4a and 2.6.4b). As an 'assemblage', the dam was also global in its financing, being funded through loans obtained by the Sudanese government from Oman, Qatar, other Arab-world development banks, China's Export Import Bank, and various Western financial institutions. It was also global in its execution, involving Sudanese and Chinese labour, a consortium of Chinese construction firms, and three European-based international companies that provided specialist, technical knowledge and inputs (Hafsaas-Tsakos 2011: 53–54; Kleinitz and Näser 2011: 255).

The project was also entangled in a web of different global geopolitical interests, not least of which was the Government of Sudan's aspirations to use the project to counter its negative image in the West at the time, owing to: escalating conflict in Darfur; repeated accusations of continuing enslavement of some of its non-Muslim populations; and its protracted civil war with different factions in southern Sudan that only formally ended in 2005. As Dr Osama A. M. Al-Hassan, the head of the Dams Implementation Unit (which oversaw the project) stated in 2009, the project sought to symbolize Sudan's 'dignity, determination and independence of decision-making; asserting the key role of electricity as a basic infrastructure for realizing sound economic, social and cultural development' (cited in Kleinitz 2013: 165). President Al-Bashir likewise made repeated statements about how the dam and associated infrastructure that included new roads, a 'hospital city', flood defences, an airport, and a large-scale irrigated agriculture scheme, would end poverty in the region (Hafsaas-Tsakos 2011: 54).

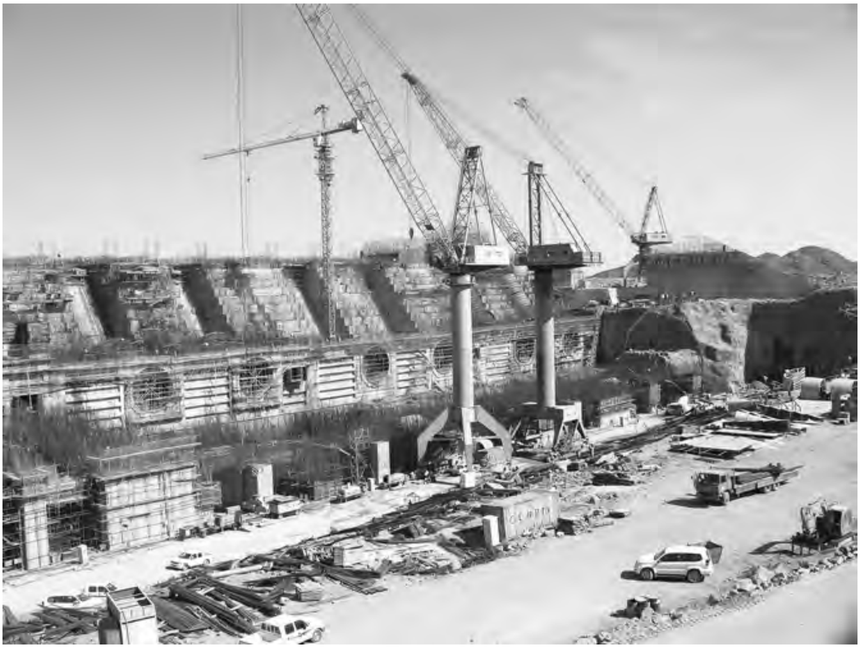

Figure 2.6.4a Merowe Dam, Sudan, under construction. (Photograph by Derek Welsby, 10 November 2006)

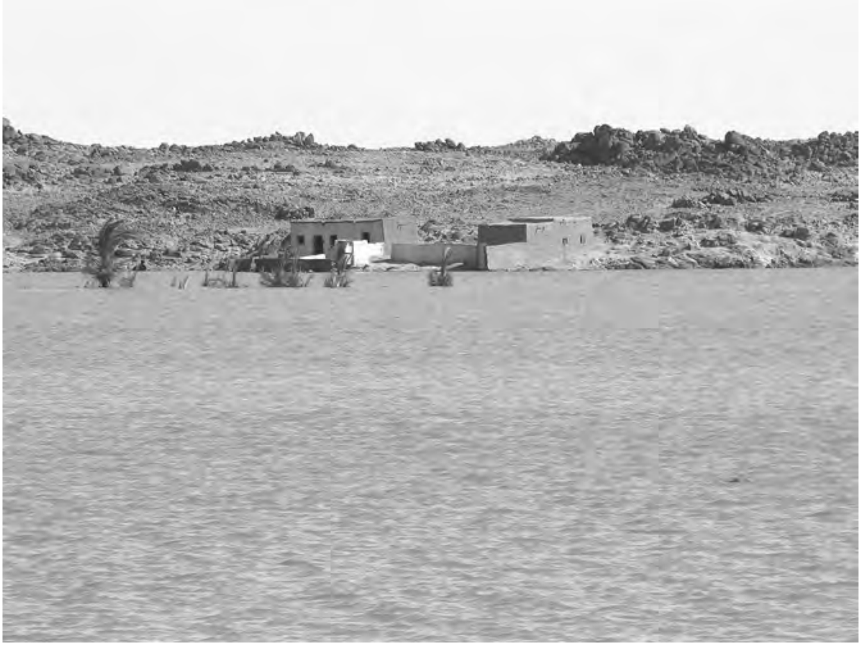

Figure 2.6.4b The new reservoir and the aftermath of the flooding, October 2008 (Photograph by Derek Welsby, 1 November 2008)

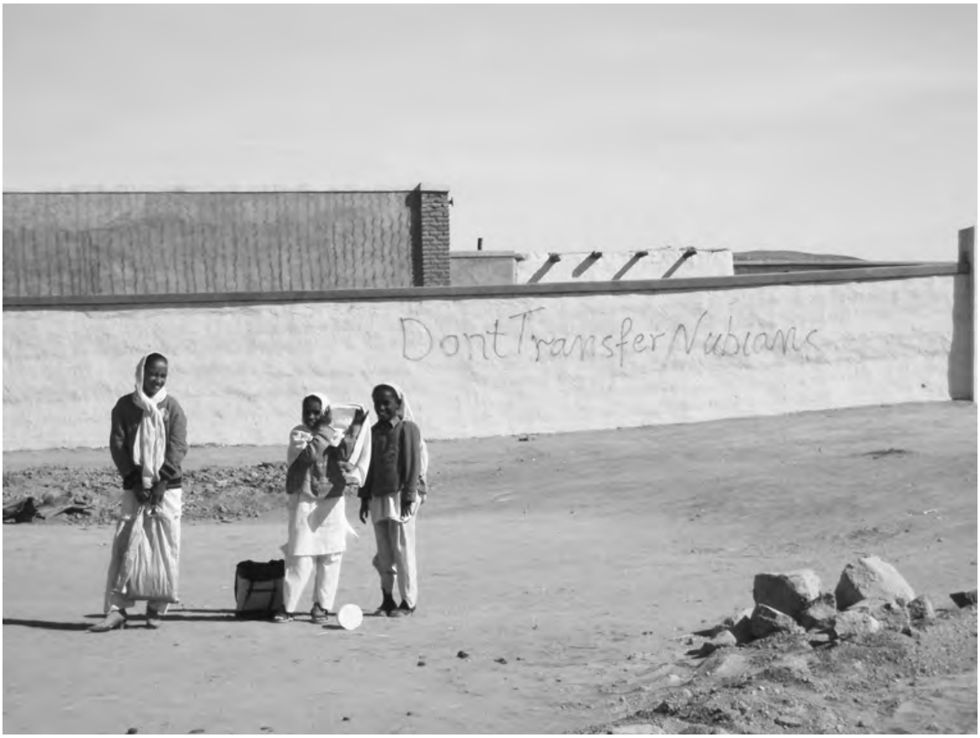

Figure 2.6.5 Nubian schoolgirls in front of one of the many slogans against the Kajbar Dam on the Third Cataract of the Nile in Sudan, January 2009. (Photograph by Henriette Hafsaas-Tsakos)

Given that the Merowe Dam site was situated in one of the poorest parts of the Sudan, where the majority of inhabitants practiced very traditional agriculture aimed primarily at meeting subsistence needs, the bringing of 'modernity', global connections, and perhaps new forms of employment might have been expected to be welcomed. Yet, from quite an early stage in the project there was strong local resistance to this top-down imposition of globalization, which ultimately resulted in the displacement and loss of land and livelihood for between 50,000 and 78,000 local inhabitants, primarily from the Manasir, Shaiqiya, and Rubatab ethnic groups. Civil protests were met by violence on the part of the Sudanese state, leading to several deaths, and the international archaeological missions – yet another global assemblage, drawn from Britain, Germany, Poland, Hungary, and the USA – and their Sudanese archaeological colleagues also became the target of local protests (Figure 2.6.5). Eventually, many were prevented from completing their work owing to the frustration of local protestors with 'the lack of commitment from the archaeologists . . . in joining forces in the fight to protect the unique natural and cultural landscape and the interests of the local people' (Hafsaas-Tsakos 2011: 62).

Although other factors certainly limited the effectiveness of the foreign missions (see Kleinitz and Näser 2011: 258-60), ultimately, in their fight for better re-settlement conditions and compensation, the 'communities affected by the . . . Merowe Dam . . . terminated archaeological salvage campaigns, deprived the international archaeological community of their perceived purpose and challenged the right of the Sudanese state to "its" antiquities' (Kleinitz 2013: 431).

Many of the foreign teams were puzzled by this, and in a few cases clearly angered, having unreflectively assumed that as they were 'saving' important heritage for the future, local communities, as well as the Sudanese authorities and the wider archaeological world would be pleased they had taken the trouble to do so. After all, unlike the Sudanese teams working on the project, who were financed by the contractor, all the foreign missions had to raise their own funding (Kleinitz and Näser 2011: 58–59). But, what most failed to recognize was that through their valorization of the pre-Islamic heritage of area over the more recent, Islamic archaeology that local people could more readily relate to through direct historical ties, and their virtual neglect of

> local cultural knowledge and practices . . . the modern people of the region were effectively relegated to being . . . [little] more than an afterthought to a long and interesting sequence of human settlement in this remote part of the Middle Nile valley.
>
> *(Kleinitz and Näser 2012: 1)*

Sometimes, perhaps even oftentimes, global heritage values, however laudable they may be in principle, are simply insufficient for the work they are supposed to do, and more glocalized approaches need to be found that look beyond stewardship for the future to include greater consideration of ensuring social and economic justice in the present.

Conclusion

As other contributors to this section and elsewhere in this book have demonstrated, 'globalization' is something that is good to think with. Once globalization is imagined as having much deeper temporal roots, catalysts, and characteristics, than those that have defined globalization since the mid-twentieth century, the concept can be a helpful and powerful tool capable of destabilizing meta-narratives of global history, especially those written from a largely Western perspective that place the global 'other' at the opposite and receiving end of the flow of knowledge, innovation, and economic opportunity. Globalization, as a concept, can certainly help complicate continental, national, regional, and even local histories and archaeologies, by drawing attention to the power and agency of those more conventionally assigned to the periphery of global networks. Yet, the lived reality of current globalizing tendencies and power structures is far from universally benign, and as modern-day global commodity and practice itself, archaeology is enmeshed in these self-same processes (Lozny 2011). It is important, therefore, that the structural imbalances that accompany globalization, whether ancient or modern, are not overlooked in our analyses.

One such imbalance that has been well-documented as being associated with modern globalization, but quite plausibly could also have been a feature of ancient globalization processes, lies in the way heritage is valorized. Specifically, current global authorized heritage discourses (Smith 2006) typically rely on a system of valorization – quite possibly set in train millennia ago by the kind of Aegyptiaca discussed by Miguel John Versluys (this volume) – that fetishizes monumental, spectacular, and material indexes of 'civilization', but overlooks and frequently ignores other constructions of heritage. As the popular ejection of archaeological missions hoping to salvage 'the archaeology' threatened by the construction of the Merowe Dam in the Sudan illustrated, frictions may well ensue from this kind of valorization. In the Merowe Dam case, this was not because the cause was bad. Rather, by ignoring the wider context of the dam project, its environmental implications, and consequences for the lives and aspirations of real people, the intentions of the different archaeological missions could be easily misconstrued. The lessons that can be drawn from this particular constellation of heritage frictions bear repeating again and again, especially as Africa's economy is stimulated by investment from China and elsewhere. No one would wish to deny African nations the prosperity and other benefits such investment may potentially bring. Likewise, precisely how the escalating loss of archaeological remains across the continent owing to construction and extraction activity is resolved is for African archaeologists to determine. Yet, it also seems entirely right to make a very simple point here, which is – without the local there can be no global archaeology.

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2.7

The mobile phone – a global good?

Modern material culture and communication technology in Africa

Julia Verne

Introduction

> [beep] An incoming text message tells Salya that her uncle in London has finally sent her the promised money. [beep] Via whatsapp she is receiving a picture of a pair of shoes, which her cousin in Canada wants to buy for her. By sending the picture she wants to make sure that the present meets her taste. [beep] She receives a text message from her grandmother who lives in Lamu, not far from the border with Somalia. She is asking when she will finally receive the dress that Salya wanted to get made for her by a famous tailor in Mombasa. And while she is still texting a reply to her grandmother, her mobile phone rings. A friend in Nairobi is asking for the new access code to the e-library of Moi University where they are both studying, reminding her that they still have some reading to do in preparation for their next seminar. After having finished the call, she uses the time she still has on the minibus on her way home to download the relevant articles to her phone. The netbook that her uncle had sent her two years ago when she started her degree is, once again, not working properly at the moment. Right, she shouldn't forget to thank her uncle for the money he just sent to her phone.

It is scenes like this one that characterize everyday life experiences of a great number of young adults in Kenya today. Almost all of them usually own at least one mobile phone, often use more than one SIM-card in order to benefit from different tariffs, and many of them even make use of a mobile internet connection. While Kenya certainly belongs to the countries with the highest distribution of smart phones in Africa – with numbers increasing rapidly – scenes such as the one described above are certainly not restricted to those countries but are characteristic of the huge importance mobile phones have gained in many African countries within not much more than a decade.

Mobile phones in Africa: a global good?

The history of mobile telephony in Africa began in 1987 with the first conversation by mobile phone in Zaïre, today the Democratic Republic of Congo. Market liberalization in several

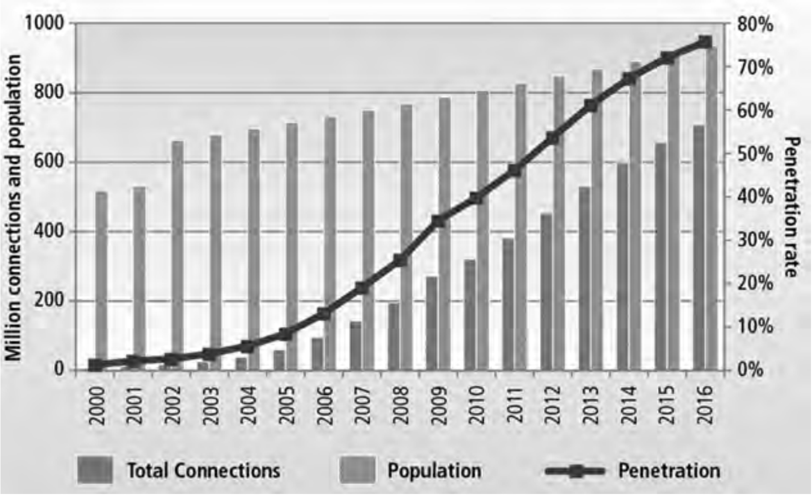

Figure 2.7.1 Mobile phone growth rates in Africa

African countries in the late 1990s finally led to the rapid increase of mobile phone usage that still supersedes all expectations. Due to the sale of prepaid SIM-cards and the availability of rather inexpensive second-hand mobile phones, even rural areas as well as less affluent parts of society have been able to participate – a development hardly any of the investors dared to predict, but which is now driving network operators and development agencies, as well as scholars from the social sciences and the humanities to further engage with the subject (Figure 2.7.1).

While plain numbers reveal rather little about ways in which mobile phones are actually used in Africa or act as globalizing agents, in many places on the continent one is, indeed, immediately struck by the omnipresence of mobile phones – in cities as well as in villages, in public as well as in private, in the form of the object itself as well as in billboard huge advertisements, wall paintings, and shops selling either mobile phones, SIM cards, credit, or accessories. At least at first glance, mobile phones in Africa surely seem to be the technological object that has most facilitated everyday life, not only in social but also in economic and political domains. This has also raised high expectations in respect to development issues. The economist Jeffrey Sachs even went as far as to proclaim mobile telephony as 'the single most transformative technology for development' (Sachs in Shiner 2009), suggesting that mobile phones have not only become a *global* good but also a global *good* which will finally boost development in Africa. However, the majority of such optimistic calls are often based on anecdotes and – a rather superficial – enthusiasm expressed by development agencies and investors, while more thorough empirical research regularly portrays a far more complex picture. Before engaging more deeply with ethnographic material on the use of mobile phones in Africa, in order to point out some of the ambivalences and dilemmas resulting from its apparent omnipresence, let me ground my reflections on recent debates over the relation between globalization, material culture and technology.

Globalization, material culture and the agency of things

McDonalds, Coca-Cola, Starbucks Coffee, Levis blue jeans, Adidas jerseys, Louis Vuitton handbags, Panasonic television, Acer laptops, Nokia mobile phones – over the last several decades, we have witnessed the global distribution of numerous consumer goods (in both 'real' and 'fake' guises), some of which have become the most popular icons in debates about globalization. However, such worldwide (over)flows of popular material culture were being noticed and critically discussed well before the advent of 'globalization' as a modern theoretical framework in the 1990s. As early as the 1930s and 1940s the fear of an *Americanization* of European, particularly English, culture was being voiced, becoming ever more prominent, a little later, in post-World War II discourses more generally. In a worldwide perspective, Americanization soon turned into Westernization, a seemingly self-explanatory term that points to the either happily anticipated or dreaded spread of 'Western' consumer goods, norms and values across the world, closely related to the concept of Western modernity. While, at first, flows of communication from 'the West' to 'the rest' had been accompanied by a 'happy optimism, in which the media would be "magic multipliers", bringing development advice instantly, effectively and extensively to the information-hungry multitudes' (Golding and Harris 1997: 4), some scholars soon began to see the spread of Western imagery and culture more critically 'as a new form of imperialism, cultural imperialism, which was more insidious and more effective in cementing the dependency of the post-colonial periphery than the fiscal crudities of earlier decades' (ibid.). Cultural imperialism soon turned into a powerful term that was taken up in the early debates about globalization, especially by proponents of cultural homogenization theories. As Nederveen Pieterse remarked in 1993, 'the most common interpretations of globalization are the idea that the world is becoming more uniform and standardized, through a technological, commercial and cultural synchronization emanating from the West' (Nederveen Pieterse 1995: 45). However, assumptions of Westernization and cultural imperialism soon had to face strong criticism as numerous empirical examples, for example on McDonald's in East Asia (Watson 1997), were able to show that global flows of consumer goods were received and dealt with locally in much more complex ways than homogenization theorists assumed. Opponents of theories of cultural homogenization therefore promoted concepts such as hybridization, creolization, or syncretization (Hannerz 1987; Nederveen Pieterse 1995), thereby questioning the idea of passive consumers and the assumption that goods, on entering another culture, will inevitably retain and communicate the values they are accorded by their cultures of origin. According to Hannerz:

> we must be aware that openness to foreign cultural influences need not involve only an impoverishment of local and national culture. It may give people access to technological and symbolic resources for dealing with their own ideas, managing their own culture, in new ways.
>
> *(1987: 555)*

Similarly, Held *et al.* emphasized how 'simple notions of homogenization, ideological hegemony or imperialism fail to register properly the nature of these encounters and the interplay, interaction and cultural creativity they produce' (1999: 374). As a result, as Miller has pointed out, 'the pendulum of academic debate has swung to such a degree that it is the creative potential of consumption that has become a presumption' (Miller 2001: 7), bringing with it an increased emphasis on processes of creativity, adaptation and appropriation (Silverstone and Hirsch 1992).

In respect to ideas about the nature of materiality underlying these debates, the key question is whether a certain object is in fact the same everywhere. As Latour (2000: 115) notes, 'nothing is more difficult than to find a way to render objects able to object to the utterances that we make about them'. If an object is the same thing wherever it is, it must be understood as an agent of change, altering life worlds at places it gets to and finally pushing the world towards an increasingly homogenous state. However, if the same object can be a different thing in different places, this means that it does not hold this capacity – in this case, what is altered is not necessarily culture or society, but possibly the material object itself. In effect, many empirical studies on the dissemination of technological objects in Africa were eager to show, and still mainly focus on, the various ways in which material objects and technologies were 'appropriated' according to local circumstances – how they were provided with new and often highly specific meanings, and how they were often physically altered in order to better fit their new social and cultural environments (e.g. Gewald *et al.* 2012).

In respect to technology, appropriation can generally be defined as the way in which users evaluate and adopt, adapt and integrate a technology into their everyday lives. Moreover, the term is sometimes used to refer to uses unexpected from the perspective of the developer or designer, emphasizing that

> users are not passive recipients of supplier offerings but play an active role in innovation, often using artefacts in ways neither anticipated not [*sic*] intended by the developers, and thus transforming our understanding of the artefact and its uses and significance.
>
> *(Williams* et al. *2005: 29)*

Here, users are presented as 'purposive, knowledgeable, adaptive and inventive agents who engage with technology in a multiplicity of ways to accomplish various and dynamic ends' (Orlikowski 1992: 423).

However, as Golding and Harris had already pointed out in 1997, this 'rediscovery of the resistant and creative, even subversive, power [. . .] can too easily slip, even within self-consciously radical discourses, into a romantic celebration of the cultural insubordination of consumers' (Golding and Harris 1997: 5). In order to avoid such a romantic celebration, today an increasing number of studies try to more explicitly address social and political situations and restraints that might limit processes of creative adaptation. Moreover, fuelled by the rise of science and technology studies and the popularity of Actor Network Theory, it is not only the specific context that is seen to change material objects, but also their very own agency. Thus, in a way, the interest has shifted again, in line with a new way of thinking about material objects.

As Verbeek puts it, 'in the past century all kinds of new objects, especially technological devices, have come to play a profound role in what we do, how we perceive and interpret the world, and what choices and decisions we make' (2005: vii). To understand these activities of things, these 'acts of artefacts' is the main ambition' of his book entitled *What Things Do*. Drawing on Actor Network Theory, studies of technology aim at telling empirical stories about processes of translation, emphasizing the 'mobility, restlessness and continuous transformation of objects' (Engestroem and Blackler 2005: 313). Technologies are not only seen as intermediaries but as active mediators that exist and transform in their relation to users with whom they form associations or networks. Accordingly, technology may be allowed 'to speak its own voice in as much as it may, to describe its own array of alliances, struggles and victories' (Kien 2009: 43). What is brought to the fore here is that scholars should not assume complete mastery of the technological objects they study

> On the contrary, [objects] will have no scruples whatsoever in objecting to the scientist's claim by behaving in the most undisciplined ways, blocking the experiments, disappearing from view, dying, refusing to replicate, or exploding the laboratory pieces, [. . .] they always resist and make shambles of our pretensions to control.
>
> *(Latour 2000: 116)*

So far, however, reflections about the agency and uncontrollability of technological objects do not feature prominently in accounts of mobile phones in Africa. While the majority of studies clearly focus on mobile communication technologies as an agent of development and modernity in Africa, others still use the mobile phone as a prime example to point out and celebrate African creativity in various processes of appropriation. In the following pages, I will therefore critically engage with these two strands of research, trying to enrich them by taking into account the specific materiality of mobile phones and their resulting capacity to act and resist processes of appropriation, whether initiated and encouraged by development agencies and investors, or observed in their everyday usage.

Connectivity: always being in touch, never getting out of reach

To better illustrate this point, let me get back to Salya, the young woman from the Kenyan coast I introduced at the beginning of this chapter. Asking her about the main benefits of owning a mobile phone, she first of all mentions the opportunity to communicate with family and friends despite physical distance. When she is in Eldoret studying at university, she enjoys being able to talk to her best friends and relatives in Mombasa. Her mother calls her at least once a day, and, since her grandmother (who lives on the island of Lamu) owns a phone as well, she can even regularly exchange some news with her. During university breaks she usually returns to Mombasa where she makes intensive use of the phone to arrange meetings with her friends and talk to them even more frequently than when she is away (Figure 2.7.2). The only annoying thing for her at home is that her younger siblings do not hesitate to interrupt her conversations when they want to borrow her phone.

Phone sharing is probably the practice most often referred to in discussions about appropriations of the mobile phone in Africa. James and Versteeg (2007) in their article on ‘Mobile phones in Africa: How much do we really know?’ point out the important difference in numbers

Figure 2.7.2 Salya and friends on a day out. Photo by J. Verne

between owners and users, as well as the difficulty of accurately estimating numbers of users and thus actual mobile phone connectivity. A number of ethnographic accounts have shown the importance of shared mobile phone use, making clear that 'the usual equation of one headset and its owner (who is also the user) does not apply [particularly] in environments of extreme poverty' (Hahn 2012: 184).

Burell (2010), in her research on phone sharing in rural Uganda, gives a detailed picture of different kinds of sharing access to a mobile phone. One village leader she talked to

> received many calls for his neighbors and made great efforts to deliver the messages he received. Others who were interviewed mentioned some satisfaction in helping others. They noted how they gained small amounts of extra air-time when people loaded air-time to make calls.
>
> *(Burell 2010: 241)*

And yet, these financial benefits were often not considered sufficient to actually compensate the 'costs of sharing' (Burell 2010: 241) – a sentiment Salya, as well, is only all too familiar with. One of her sisters, especially, often keeps Salya's phone for a couple of hours when she goes out. Apart from the fact that Salya would rather use it herself during that time, what she finds particularly annoying is her sister's intrusion into her personal affairs. She teases Salya about text messages she has sent or received, asks about people who called her and looks at the pictures saved on her phone, and there seems to be nothing Salya can do about it. The same argument is made by one of Burell's interview partners, who also refers to his phone as 'personal' because 'the phone records, it can keep my secrets . . . which I don't want anybody to see' (Burell 2010: 240). Being a businessman, he is very aware of the importance of his contacts for his success, so that he does not want to share them with others. Some interviewees even admitted that they were hiding their phones from others in order for people not to know they had a phone at all and, thus, avoiding the need to share the phone, and with it the contacts, records, or pictures saved on it (Burell 2010: 242).

Moreover, increasing mobile phone connectivity is often also closely linked to the ambivalent process of sharing money. In early 2007, Safaricom, the largest network operator in Kenya and part of the Vodafone Group, launched m-pesa, 'an innovative payment service for the unbanked' (Hughes and Lonie 2007: 63) that has inspired a number of operators in different African countries to develop similar mobile money services. The name is derived from 'm' for mobile and '*pesa*', the Kiswahili term for money.

> The product concept is very simple: an M-PESA customer can use his or her mobile phone to move money quickly, securely, and across great distances, directly to another mobile phone user. The customer does not need to have a bank account, but registers with Safaricom for an M-PESA account. Customers turn cash into e-money at Safaricom dealers, and then follow simple instructions on their phones to make payments through their M-PESA accounts; the system provides money transfers as banks do in the developed world. The account is very secure, PIN-protected, and supported with a 24/7 service provided by Safaricom and Vodafone Group.
>
> *(Hughes and Lonie 2007: 63)*

M-pesa was soon celebrated as an African success story, and a prime example of the appropriation of a foreign technology, with six million people registering for the service within only two years after its implementation, comprising about 50 per cent of all Safaricom customers at the

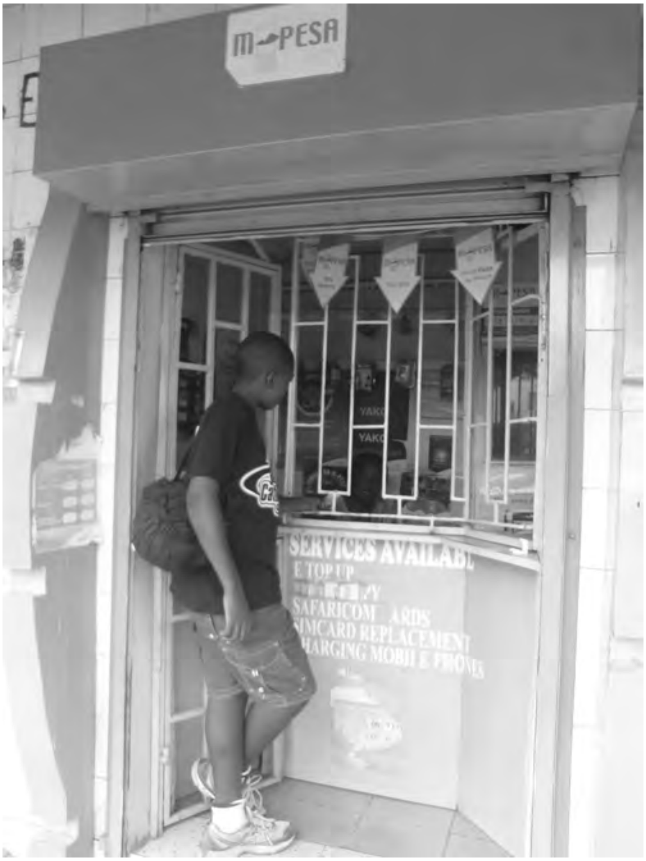

Figure 2.7.3 M-pesa shop in Kenya. Photo by J. Verne

time (Mas and Morawczynski 2009). Subsequently, penetration rates have increased further and m-pesa has become part of everyday life for the majority of Kenyan mobile phone users (Figure 2.7.3).

Salya subscribed to the service as well. During term time, when she is staying in student accommodation in Eldoret, her parents send her a monthly allowance via m-pesa. Additionally, her uncle who is living in the UK sends her some money at the beginning of each term. She is paying her rent and the electricity bill using m-pesa, and more and more often she also uses mobile money to pay her groceries. If she doesn't have the time to go shopping herself and asks a friend to get her something, she sends her the money in advance. Thus, m-pesa certainly simplifies her everyday life: no long queues when having to pay for electricity, no regular trips to the next office of Western Union and no more uncomfortable, monthly visits of her landlord when having to pay the rent. However, saving money and calculating expenses has, in a certain way, become more difficult than before, despite being one of the motivators behind the development of mobile money services.

Due to increased connectivity and the ease with which money can be transferred from one account to another, requests for money have also increased considerably. As Sey illustrates drawing on research in Ghana, financial issues and remittances are the main reason for making phone calls (Sey 2011: 383). In Salya's case, besides some of her friends, it is particularly her cousins and siblings who regularly ask her for money. Her mother sometimes even just grabs her phone and transfers some money into her account. At times, she finds these frequent negotiations about money such a burden that she would rather be disconnected and, therefore, simply unable to fulfil the demands of others. But, as long as she is within reach via the mobile phone, it is hardly possible to avoid the issue.

How expectations of others might constitute a burden also becomes obvious in the context of 'beeping' or 'flashing', a final example of how processes of appropriation in respect to mobile phone connectivity can 'bite back' (Tenner 1996). Whenever someone has run out of credit, or doesn't want to spend his own, it has become common to simply let the phone ring once and then hang up, in this way asking the recipient to 'please call back'. Some operators even offer free text messages saying 'please call me' (Donner 2007). While, on the one hand, this practice is seen to support the connectivity of people with very restricted financial means, what is often neglected is the effect such calls and messages might have on their recipients.

Although Salya and her friends all make extensive use of 'beeping', sometimes just to say 'hi' or remind each other of some shared memories, they all complain about having to spend too much money on responding to 'beeps'. As Archambault argues convincingly,

> for younger unemployed men who only get money sporadically, even the small gesture of replying to a [beep] may, at times, be beyond their reach. [Beeping] not only puts added pressure on young men, it also makes their hardship more apparent. As [one of her interviewees] pointed out, 'A girl will think: "What can this man offer me if he can't even call me back?".'
>
> *(Archambault 2012: 407)*

So, although generally being happy about increased connectivity and new services, many people, at times, also find it tiring and annoying to be reached day and night by everyone. As a teacher in Bamenda, Cameroon, emphasizes, even when you receive calls you do not want, according to social and cultural contexts, you still have to answer them (de Bruijn *et al.* 2010: 276). And, as we have seen, disconnecting your phone can sometimes have worse consequences, being a source of suspicion and sometimes even of conflict. In other words, the particular materialities of the mobile phone, its abilities as well as affordances, pose a hindrance to its varied processes of appropriation. While it follows the commands of its user, at the same time, it develops a life of its own that can sometimes be so annoying and result in serious drawbacks that users start questioning the technology up to the point where some do not even want to own a phone anymore.

Information: high development potential, great use in crime

So far, in my engagement with the literature about mobile phones in Africa I have focused on everyday life and issues of personal connectivity. However, as outlined at the outset, the majority of work still concentrates on the development potential of mobile phones. In this respect, appropriations of mobile communication technologies are brought to the fore which are driven by the intention to make the exchange of information more efficient and distribute information more widely than before. As Ling and Horst point out,

> Like computers and the internet, mobile phones have captured the attention of a range of stakeholders in international development agencies, government entities, corporations and most importantly among common people. Mobile phones' relative accessibility, affordability and ease of use (compared to the PC) hold the promise of bridging the so-called

> digital divide. New programs such as M-Pesa in Kenya, the m-health initiatives of different agencies and a wide range of mobile information diffusion projects have all illustrated the potential of mobile phones to be utilized as instruments of development.
>
> *(Ling and Horst 2011: 365)*

In Kenya, for example, livestock owners are provided with mobile phones, including GPS technologies, so that they can immediately distribute information about any death among their cattle to the national livestock monitoring office, together with the exact location of the carcass. By doing so, it becomes possible to collect timely information about livestock epidemics and react at once (Winters 2010). Moreover, digital pens transmitting relevant data to a central online database via Bluetooth have been distributed among veterinary officers in 80 Kenyan districts in order to facilitate animal surveillance and disease reporting (Food and Agriculture Organization of the United Nations 2011). The veterinary head office in Nairobi then uses this information to map out endemic areas and prepare for potential disease outbreaks, such as anthrax, foot and mouth, and Rift Valley Fever. Finally, the FAO (Food and Agriculture Organization of the United Nations), together with the Royal Veterinary College and a local NGO (non-governmental organization), support the mobile phone application EpiCollect, developed by researchers at Imperial College London's School of Public Health. EpiCollect is designed to track animal vaccination and treatment campaigns, so that veterinarians do not have to travel to remote locations anymore. Instead, the information is now transmitted in real time and can be stored and updated easily when herds move from one location to another (see www.thecattlesite.com/news/41751/cell-phones-revolutionizing-kenyas-livestock-sector).

While these examples of the use of mobile communication technologies enhance and hasten the spread of information, and thus may actually support development in certain fields, 'ethnographically grounded studies on mobile phone use in specific socio-historic contexts suggest, however, that the link between ICTs and development often rests more on wishful thinking than empirical findings' (Archambault 2011: 446). That certain technologies are available, of course, does not necessarily mean that they are actually used. A project in the field of mobile governance may serve to illustrate this point.

Daraja, a Tanzanian NGO devoted to bringing citizens and government closer by making local governments more responsive to people's concerns and by ensuring that citizens can hold their government to account (www.daraja.org/home), developed a project called 'Maji Matone – Raising the Water Pressure' aimed at encouraging citizens to put pressure on the local government to address problems about rural water supplies. Here, mobile phones and the provision of free messages to the relevant authorities as well as to the media were meant to facilitate the involvement of citizens in order to increase the pressure on local governments to repair broken down wells and ensure that funding for water supply is fairly used (www.daraja.org/our-work/rtwp). But even in an area where about 50 per cent of rural water-points were not working, only very few messages were actually sent and some of those were not even addressing the water issue at all. Therefore, a lot of effort was made to persuade citizens to send messages. However, the success was very limited, so the project had to be put on hold. While low literacy and education levels, difficult access to information and the lack of a steady source of electricity to charge the phones were blamed for the failure, another major problem was identified in the sense of powerlessness among citizens in respect to local authorities. Moreover, people feared that the feedback sent to the government could be traced back to them and earn them the reputation of troublemaker (see http://blog.daraja.org/2012/02/why-did-maji-matone-fail-1-low-tech.html). The difficulties of fully grasping this technology made the mobile phone uncanny and not trustworthy enough for most people to actually participate in the programme.

Examples like this one illustrate the idealism involved in many approaches to new technologies in Africa. Even though there are many articles describing how mobile phones enhance commerce, facilitate the exchange of information and generally make life safer, 'this line of narration often does not take into account the difficulty of parsing information and the inadvertent spreading of disruptive information' (Ling and Horst 2011: 367). As a wholesale trader in Dar es Salaam reveals to Molony in the course of his study on the use of mobile phones in the domestic tomato and potato trade: 'I don't trust the phone, it always lies' (Molony 2009: 105). Here, he especially refers to the fact that information he offers to his suppliers over the telephone can easily spread so widely that it becomes counterproductive and in fact reduces prices.

Due to its capacity to spread information immediately, the mobile phone has also been identified as a facilitator of crime. As Hahn illustrates in respect to overland transportation in Burkina Faso:

> In order to seize the possessions of the passengers from a passing car, the gangsters force the driver to stop by directing a gun at him or by placing a wooden trunk across the road. They force the driver and passengers out of the car and seize their money and valuables. [. . .] In descriptions of the robbers' strategies, mobile phones are mentioned as contributing decisively to the efficiency of the crimes. [. . .] The relevant information about cars and buses with wealthy passengers on them is then communicated by mobile phones. [. . .] As the police officer further reported, the gangsters destroy the SIM-card immediately after using it, because they are well aware that their conversations may have been recorded to help the police track them down. Although police experts have managed to link mobile phone conversations to gangsters' activities, it had never been possible to identify a SIM-card owner.
>
> *(Hahn 2012: 186)*

To undermine the practice of 'suspects who buy mobile phones anonymously, use them for a short period of time, and then dispose of them before law enforcement can track the usage or location and other data' (McEwen 2011: 135), shops in South Africa (as in many other African countries, including Kenya) have been required to record the name, address, phone number and passport number of purchasers and sometimes even check a utility bill to confirm the address. Here, it becomes clear how mobile phones may not only facilitate the spread and exchange of important information, as hoped for particularly in the context of development interventions, but how they can also resist this function, either by not emanating enough faith in their use, or by allowing people to use this function in uncontrollable, bad, and sometimes even criminal ways.

Virtuality: together, but separate

Arminen claimed in 2007 that 'the current vision seems to be that mobile communication converges with the increase in local wireless networks. [. . .] The convergence will merge the Internet and the mobile telephone as we know them now' (Arminen 2007: 435). And, indeed, many examples of the use of mobile phones in development projects or as envisioned by software engineers and designers working on technological adaptations in the African context already involve the Internet. Even though smart phones and tablet PCs are certainly not as widespread in Africa as they are in Europe, they have still come to play a crucial role in providing considerable parts of the population with access to the World Wide Web. And maybe more than browsing and searching for useful information, people use their mobile Internet access to 'meet' online, become 'friends' and 'like' each other's news on Facebook, chat with each other on Skype, join online discussion groups, or play games against each other. And although most of these practices have only been available for a couple of years, many of them have already become part of the mundane.

This has become especially relevant in contexts of transnational connections. What Vertovec has already argued in respect to phone cards and mobile phones applies all the more today: 'communication technologies are increasingly used transnationally to link migrants and homelands in ways that are deeply meaningful on both ends of the line' (Vertovec 2003: 15). A number of scholars have been able to show how new communication technologies have enabled migrants to maintain close connections with their friends and families in other places in a way that has not been possible before (Panagakos and Horst 2006) and how, by doing so, they possibly alter the relationship between the Global North and Global South more generally. In this respect, the use of mobile Internet is proclaimed to change radically or even overcome conceptions of space by 'unwiring and de-locating us, [. . .] taking us out of fixed spaces [and freeing us] from the confines of location' (Sanders 2008: 181). Mobile phones allow their users, in Africa as elsewhere, to experience a certain proximity to those they are communicating with, even if they are in fact far away. Expressions such as 'mediated presence' or 'connected presence' are used to point at the moments in which 'the (physically) absent party gains presence through the multiplication of mediated communication gestures on both sides, up to the point where co-present interactions and mediated distant exchanges seem woven into a single, seamless web' (Licoppe 2004: 135). To illustrate this, let us come back to Salya once again.

Via Facebook and WhatsApp, Salya can communicate with her friends and relatives independent of her location. Once she has signed up for an internet flat rate, offered for periods as short as one day, she not only uses the service to send and receive messages endlessly, she also exchanges pictures and music, and, usually in the evenings, uses Skype or Viber to talk to her boyfriend Massoud. Massoud is a distant cousin and they have known each other for a long time. But it was only after she was given her own mobile phone that they got to know each other better and finally started a romantic relationship, if still in secret. Especially since Massoud has gone to study in Malaysia, she would not want to live without the opportunity of video conversations. It is these long, private conversations, mediated through the Internet, that most significantly alter her experiences of space, as they enable her to transcend her local context and create a sense of proximity and closeness despite physical distance. In such intimate moments on the phone, as well as when receiving pictures of her cousin's wedding in Dubai, or when joining the birthday celebration of her nephew in London via Skype, we thus find the 'subtle folding together of the distant and proximate, the virtual and the material, presence and absence' (Amin 2007: 103).

In general, the mobile phone has certainly intensified relationships with friends and relatives abroad. Applications such as WhatsApp, Skype, Viber, and Facebook all contribute to the frequent exchange of news, impressions and emotions between distant places and, in a way, allow their users to 'uncouple oneself from the immediate environment' (Callon and Law 2004: 7) and facilitate 'a sense of involvement in each other's everyday lives' (Horst 2006, 156). But even though, as Larsen *et al.* (2006: 262) have put it, virtual communication may 'resemble physical meetings' and can be the 'best substitutes when these cannot take place', they are still not the same.

Misunderstandings that occur in mobile phone interactions, especially in the context of intimate relationships, are described as one of the mobile phone's biggest drawbacks. Drawing on her ethnographic experiences of young adults' lives in Inhambane, Mozambique, Archambault presents vivid insights into situations ‘when connections backfire’, leading to conflicts and splitting up ‘because of the phone’ (Archambault 2011: 444). As Balsa tellingly explains:

> When you try to reach your boyfriend and all you hear is ‘*liga mais tarde*’ (‘call later’, the operator’s message when one’s phone is disconnected), the first thing that comes to mind is that the person is with someone else.
>
> *(Archambault 2011: 451)*

Salya, so far, has not experienced any such problems in her relationship to Massoud. Both of them make an effort to always have their mobile phone switched on and connected, and whenever one of them travels somewhere where the connection might be interrupted, if due to power cuts or gaps in the network coverage, they let each other know in advance. This way, they do not let the material affordances of the mobile phone win over their relationship.

But, nevertheless, even the most intimate conversation ends at some point; someone has to hang up, if the phone battery has not died before. At some point the video conversation has to end, someone has to sign out and, in doing so, leaves the other one alone in their respective location. Moreover, the impossibility of touching or hugging her boyfriend serves as a constant reminder of the physical distance separating her from him. Thus, while virtual mobilities enabled by the mobile phone may allow for enhanced connectivity and exchange, they also involve, and might sometimes even reinforce, feelings of separation, loneliness and longing. The mobile phone somehow lures its users into a sense of togetherness which, as soon as the connection ends, suddenly ‘bites back’, with the subsequent silence reminding them of their actual location in the world.

Conclusion

Mobile phones have become the most widely diffused communication technology in the world. By the end of 2015, the International Telecommunication Union held that 97 out of 100 people worldwide had a mobile phone subscription. Even for Africa, they now suggest a rate of 67 out of 100 on average (www.itu.int). However, despite such overwhelming numbers, James and Versteeg (2007) convincingly remind us not to rely too much on statistics since, particularly in the context of Africa, data on actual mobile phone users are not very reliable. Moreover, numbers do not say much about what people actually do with the phone, and what this in turn does or does not do to the phone. As White has argued for an earlier period:

> Tools and technology have recently been studied as one of the ways Europeans dominated the colonized world; they were supposed to overpower Africans or to mystify them. But the contradictory meaning of tools in these stories is too complex, and too layered, to be explained in any single way.
>
> (*White 1993: 41*)

And while numbers certainly only give a rather superficial, if impressive, idea of mobile phone diffusion in Africa, more empirical research is needed to more deeply explore mobile phones in all their complexity and ambivalence.

In opposition to those still promoting the theses of cultural imperialism, in the African context numerous examples portray varied processes of appropriation and adaptation – sharing, beeping, or special applications in the fields of mobile money, mobile health or mobile governance. However, against the background of thorough ethnographic research it can also be illustrated, and this was the central aim of this contribution, that the material specificities of mobile phones also pose limits to such appropriations and adaptations. By having drawn from my own research on mobile phone use among young adults along the Swahili coast, as well as from the ethnographic work of others, I hope to have shown that the actual ways in which users and technologies interact often challenge expectations and, in particular, ask for a refinement of the assumptions leading interventions and investments in the field of development. As a young man interviewed by Archambault expresses:

> Yes, we know that the phone should be seen as a *good* thing, that it was invented to do good, but in reality, it is not necessarily so. [. . .] The phone is important because it allows you to know things. But then there is a tendency to not want to know things.
>
> *(Archambault 2011: 453)*

Thus, even though it clearly facilitates certain things, such as frequent calls between friends and relatives, intimate conversations, the exchange of information and money, and for those who can afford a mobile Internet connection, even extended communication with friends and relatives abroad, in all this we find negative aspects as well; the phone, in other words, 'bites back' (Tenner 1996). People may try to adapt it to their specific needs, but the mobile phone does not stop there. Far from being a fixed object, it can act in opposite directions and alter its role as a communication device, always combining local appropriations and universal dynamics in different ways. It is mutable over time and space, but this mutability cannot be fully controlled by its users, neither in Africa nor anywhere else in the world. Therefore, it is all the more important to try 'not to lose the influence of the object in what is said about it' (Latour 2000: 116), particularly in contexts such as Africa, where debates still strongly focus on the global *good* this global good may bring.

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Part III

Americas

3.1

Globalization processes as recognized in the Americas

Alexander Geurds

The land area referred to as the Americas is enormous, composed of two of the world's seven recognized continents and approximating the total area of Asia in its entirety. Clearly, it is impossible to survey globalization processes in the Americas by means of six chapters. The Americas encompasses divergent geographies, ranging from the Canadian Arctic down to the Antarctic islands of Tierra del Fuego. It features a great diversity of indigenous culture from the North American Plains and the Rocky Mountains, past the Middle American isthmian tropics and including the archipelago of the Caribbean Sea, into the Amazonian lowlands, featuring the second largest river in the world, which in turn is fed by the melt water and sediments eroding out of the world's longest mountain range, the Andes.

From the moment of initial colonization, perhaps some 40,000 to 20,000 years BP, and certainly from the first traces of sedentism emerging in the Middle Holocene, humans adapted to the geographical diversity of the Americas by means of establishing exchange networks. Arguably, this eventually led to the emergence and expansion of the Inca and Aztec early states. In 1492, the Americas entered the early modern era of globalization when European nations colonized the area and a confronting process of economic, religious and social meshing of European and indigenous culture began.

Archaeology in the Americas was initially structured around culture history's drive to define bounded areas in which cultural cores were identified. Concepts such as style, type and pattern were keywords. The diffusionist notions underlying much of this work are no longer subscribed to, but the importance of economic cores as trade centres did become a strong emphasis. Ultimately, regions were perceived as consisting of hierarchical trade networks (cf. Sanders and Price 1968). Theorizing as to the reasons behind these networks has been varied, but much falls under the rubric of systemic economic exploitation for purposes of acquiring and maintaining (political) power (Schortman and Urban 2012). Such studies are nearly exclusively restricted to the investigation of socio-politically complex societies, leaving 'non-complex' social entities largely out of view (Silverman 2008: 19).

Similar to archaeological analyses elsewhere, some cultural areas in the Americas are conceptualized as worlds (Peregrine and Feinman 1996), echoing Wallerstein's World Systems Theory (WST) (1976). The Mississippi Delta in the southeastern US (Griffin 1967; Pauketat and

Emerson 1997); the Mesoamerican region, principally in Mexico and Guatemala (Blanton and Feinman 1984; Smith and Berdan 2003); and the Andes (La Lone 1994) are all regions where 'worlds' are recognized in different periods. This economic boundedness of a systemic perspective views social, religious or political reasons for the existence of such networks as secondary in importance: distributing cores attend to receiving peripheries, and vice versa. What the chapters in this section argue instead is that local responses to globalizing processes in the Americas were often based on personal or community convictions, rather than reflexes against economic forces.

The section is severely restricted in size and leaves numerous major archaeological areas in the Americas unattended, including, but not restricted to, the arguments of regionalism in the southeastern US (e.g. Lankford *et al.* 2011); boundary studies in the southwest US (e.g. Stark 1998); relations between the Maya spheres and parts of southern Central America (e.g. Schortman and Urban 2011); the prehispanic and early colonial networks around the Caribbean Sea (e.g. Hofman and van Duijvenbode 2011). Also, more historical archaeology can be added to the debate, for example the consequences of European colonization in California and more southerly parts of New Spain (e.g. Voss 2008). In all, however, this section provides an overview of some of the main areas where the globalization process can be recognized and each chapter observes particular elements of how change in material culture comes about and the roles of those who participate and steer this process.

One of the earliest cases for globalizing trend in the Americas occurred during the second millennium BCE when the distinctive Olmec style emerged in different parts of present-day Mexico and coastal Guatemala. In his chapter, Rosenswig observes that these features in material culture are accompanied by the earliest examples of sociopolitical complexity, and thus may be considered to be the beginnings of what is called the Mesoamerican culture area. He argues that globalizing trends are closely related to political economies, when materials obtained through long-distance exchange are valued not just for their rarity but also for how these distant objects represent a measure of the effort and skill of those who procured them by passing through culturally and physically distinct landscapes. Rather than complementary exchange of one scarce valuable for another, this long-distance exchange seems to find its origin in exotic desires for Olmec-style objects. Contrary to temporally later examples in this section, this case demonstrates that long-distance connectivity can exist for the profit of a reduced number of 'nodes', leaving entire in-between regions essentially unconnected in this mobility and exchange. As such, early forms of globalization created 'archipelagos of cultural complexity', echoing Fernand Braudel's analysis of medieval Europe.

Lau presents a comparison of the three principal globalizing periods in the prehispanic Andes, known as the Early, Middle and Late Horizons. The Andes is a region defined by particular 'bursts' of increasing connectivity, separated by periods of relatively more atomized cultural spheres. Lau discusses the different foci of the three periods, with the Early Horizon (1000 BCE–1 CE) being associated with Chavín culture, establishing long-distance connections enabling the exchange of objects used in ritual settings. In contrast, Wari culture, associated with the Middle Horizon (700–1000 CE), is marked by the spread of a material culture style that was traded as well as emulated across numerous Andean linguistic frontiers. The Inca, finally, established distribution networks throughout the Andes during the Late Horizon (1450–1532 CE). Globalization processes are recognizable here through the establishment of infrastructural and administrative networks, by which both exotic valuables and bulk goods were exchanged. As Lau demonstrates, these three cases of globalization are remarkably diverse in the kinds of objects involved and the level to which power-seeking elites intervened at local levels. Despite these particular characteristics, all are comparable in the sense that the objects exchanged eventually obtained particular local expressions.

Geurds discusses macro-scale, long-distance maritime mobility between coastal areas of Middle and South America and the attestable effects on the archaeological record. Principally argued through the relatively late introduction of metallurgy in the Mesoamerican region (but also involving a long culture history of diffusionistic evidencing), such long-distance contacts are likely to have been regular and sustained in character. Nonetheless, the regional-scale importance of these contacts is as yet still poorly understood. Geurds draws attention to the importance of copper material culture and the divergent local choices made in (western) Mesoamerica with regard to technological changes and selective use of metal objects (see also Hosler 1994). These choices seem to fit recurring effects of globalization processes, especially the re-embedding of local culture (Jennings this volume).

Sillar highlights a particular and understudied element of globalization processes in archaeology, which is the movement of people for purposes of political expansion. The displacement of people in considerable numbers in the South American Andes in the final three centuries before the arrival of Spanish colonizers was instigated by a hegemonic system of rule instated by the Inca, not unlike the system of transatlantic slavery witnessed in later centuries. Archaeologically, this transferal of several million people to different parts of the governed territory is poorly visible, but must have been a principal component of the globalizing spread of Inca material culture. Defining for Inca expansionism was the construction of an extensive network of thousands of kilometres of roads and suspension bridges. Creating this physical infrastructure ensured control and transport capabilities in the topographically challenging Andean highlands. Importantly, Sillar's contribution asks us to reconsider the one-sided perspective of political cores that influence wider surrounding regions economically and materially. He convincingly shows how the Inca globalizing process was as much about incorporation of local economic structures as it was about local emulation of Inca material culture. The globalization process in the Late Horizon Andes, as described here, was about commitment at the household level.

Berdan's analysis of the Aztec world encompasses both the prehispanic Late Postclassic period (1430–1521 CE) as well as the first decades of the Early Colonial period (1521–1570 CE), when European colonial expansion started to include the Aztec cultural sphere in New Spain. In bridging what traditionally (and problematically) is seen as the prehistoric–historic divide, she presents processes of connectivity, within which adoption and resistance in both the Aztec hegemonic practices of territorial expansion as well as the initial period of Spanish colonial administration take shape. The events in these central regions of the Mesoamerican culture area hold particular value for analysing globalization, as the accompanying spread of materials (both for bulk consumption and tribute) represents a particularly high degree of change as well as adoption and incorporation.

Early modern globalization began in the early part of the sixteenth century when the Americas became involved in trade networks that truly spanned the globe. As Orser's contribution illustrates, global networks of connectivity were established between European colonizing nations by means of flows of objects and people between Asia, Africa and the Americas. Orser stresses, through the example of trade in Chinese porcelain ware, how receiving markets in Europe as well as colonial settlements in the Americas generated growing demand and, subsequently, responded to this demand by emulation and hybridization of imported materials. During this colonial era, the numerous European powers active in the Americas, regarded the continent as a material cornucopia, waiting to be 'tapped' as Orser poignantly states it. Orser brings a further defining feature of globalization thinking to the fore in his mentioning of practices of producing Chinese porcelain derivatives. This resulted in the use of different source materials and iconographic deviations of original Chinese examples – an example of 'glocalization' as a feature of globalizing developments. For Orser, such local adaptions to imported materials are one of two hallmarks of globalization, the other being 'grobalization'. Grobalization is defined as the inevitable territorial growth of political and economic entities in light of a need for expansion. To be debated is whether the capitalist notion of continual growth is also valid for prehispanic political economies, as the accrual of material wealth seems to have been of secondary importance when compared with the centralized redistribution of materials.

All these chapters stress the local initiatives taken in periods of encounters with others, be it economic, religious or social and whether coerced or voluntarily. At times the archaeological traces of the globalizing force are invisible, as in the case of the displacement of people. In other occasions they are undeniable as in the spreading of horizon styles. The perspectives chosen here oscillate between regional development and local situations, bringing out the volatile conditions in which material innovation occurred as a result of global–local dynamics.

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3.2

Olmec globalization

A Mesoamerican archipelago of complexity

Robert M. Rosenswig

Introduction

On the occasion of the 150-year anniversary of the *Communist Manifesto*, a *New York Times* columnist observed that Marx and Engels had 'recognized the unstoppable wealth-creating power of capitalism, predicted it would conquer the world, and warned that this inevitable globalization of national economies and cultures would have divisive and painful consequences' (Lewis 1998). Marking the same anniversary, Hobsbawm noted that 'what might in 1848 have struck an uncommitted reader as revolutionary rhetoric or, at best, as plausible prediction – can now be read as a concise characterization of capitalism at the end of the twentieth century' (1998: 18). Marx and Engels long ago recognized that capitalism made globalization inevitable, which is why they proposed that political activism also had to operate at an international scale.

Twentieth-century scholars influenced by Marx and Engels explored global processes under a variety of titles (Braudel 1992; Wallerstein 1974; Wolf 1982). Such scholars built on the insights of historical materialism in their analysis of the increasingly interconnected world. However, rather than being solely a modern phenomenon, for over three decades macro-scale connections have been recognized as equally important in the ancient world (Blanton and Feinman 1984; Kohl 1987; Schneider 1977; Schortman and Urban 1987). Archaeologists more recently employ the term globalization to describe ancient inter-regional connections (Gills and Thompson 2006; Jennings 2011; Kiple 2007; Feinman this volume).

The term 'global' is a misnomer for periods prior to when peoples in the western hemisphere and the Old World established regular contact. Yet, this usage is consistent with Braudel's definition of a *world-economy* that 'only concerns a fragment of the world, an economically autonomous section of the planet able to provide for most of its own needs, a section to which its internal links and exchanges give a certain organic unity' (1992: 22). Wallerstein (1974, 1995) defines world-economies in much the same way and has recently outlined the importance of Marxist modes of production as well as Braudel and the Anales School to the ideas he helped popularize (Wallerstein 2004: 11). 'World' would be a better root than 'globe' to describe interconnectedness that is less than planetary (Hall et al. 2011: 236–340). However, I will not quibble over semantics in defining a globalized ancient world (Frank 1995; Knappett this volume).

Inequalities are an inherent aspect of long-distance connections. Analysis of the modern world has borne out the inherentness of inequalities by documenting that foreign investment systematically benefits wealthy investor countries (e.g. Chase-Dunn 1975; Frank 1979; Kentor 2001). Miller's (1998) study of Coca-Cola in Trinidad is a classic example of the economic and social benefits to the local elite who run the bottling franchise. A complementary facet of inequalities produced by long-distance trade occurs between those who control long-distance trade and those who do not. While certain regions of the world benefit more from global connections, equally important is that within any globally connected region, long-distance trade provides yet another mechanism through which class differentiation is increased and wealth concentrated. Globalization helps to further separate producers from the fruits of their labour.

In this chapter, I outline the inequalities intrinsic to ancient globalization. Such inequalities can be the result of areas that are more centrally located or technologically advanced than other areas. Equally important are the intra-regional inequalities facilitated when certain groups position themselves to preferentially benefit from long-distance connections. This observation

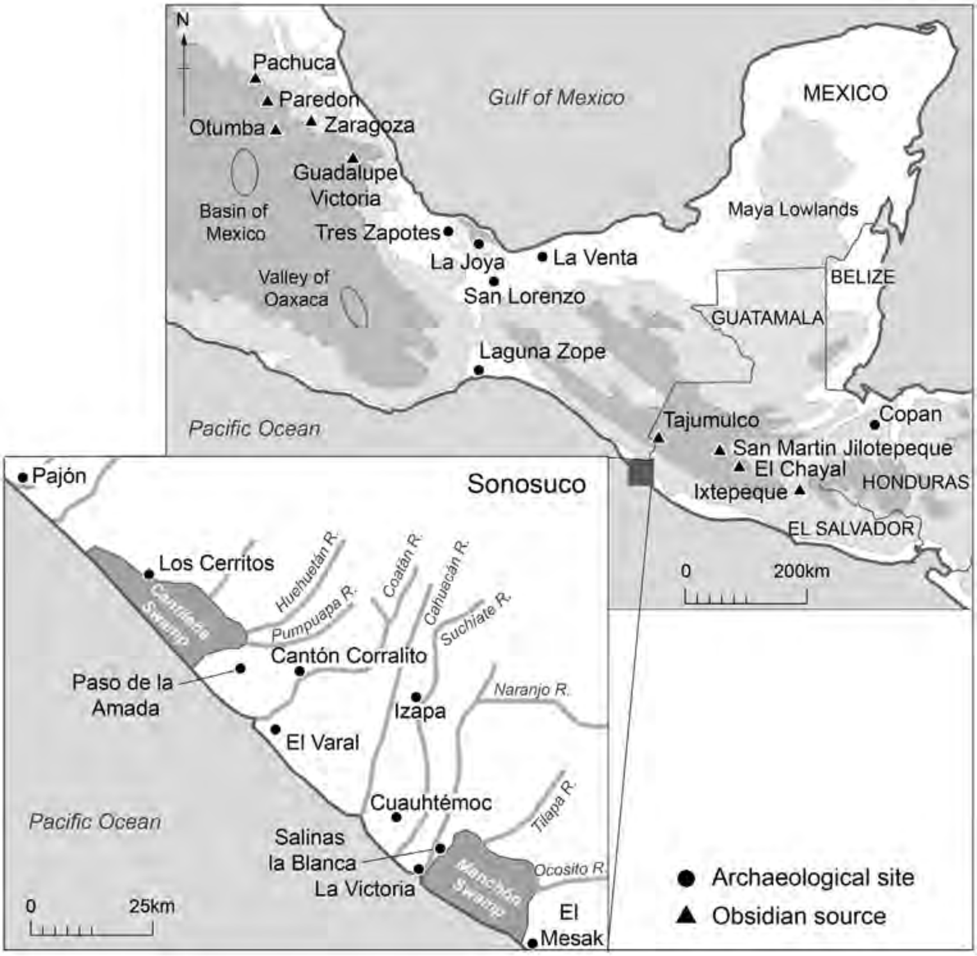

Figure 3.2.1 Map of Mesoamerica with areas, archaeological sites and obsidian sources mentioned in the text

provides the segue to outline a model of the second millennium BCE Mesoamerican world as forming an archipelago of cultural complexity (Rosenswig 2010: 13–46, 2011). Drawing on Braudel's (1992) description of medieval Europe as an archipelago of towns and Upham's (1992) focus on the apparently 'empty' regions between large permanent centres, I argue that Olmec imagery is documented in Mesoamerica only within a limited number of islands of sedentary adaptation during the second millennium BCE (all dates calibrated). I conclude that to understand 'global' interconnectedness we need to explore why people would initially go to the trouble to interact with distant peoples. Trade of goods not locally available is one obvious answer. However, I argue that it was the aspiration of local leaders who sought foreign ties to bolster their power and prestige at home that was the engine that powered inter-regional connections (following Helms 1988, 1993). Evidence from Mexico's Gulf Coast and the Soconusco region of coastal Chiapas during the second millennium BCE are then presented as examples of two early Mesoamerican islands of complexity (Figure 3.2.1).

Long-distance connections

Connectivity is the basis of globalization theory, world-systems theory, or any other label one attaches to the study of inter-regional interaction (Jennings this volume; Knappett this volume; Feinman this volume; Robertson this volume). Connections and cultural contact result in the shared aspects of material culture that archaeologists use to document the extents of the worlds they study. Similarly, today, one can eat at a Sino-Italian fusion restaurant in Vancouver, one's children in the United States can be obsessed with Pokémon and French youths smoke Marlboros, romanticizing the freedom of cowboys while concurrently despising the consumerism inherent in American culture. Commercial air travel and the internet have intensified the immediacy of contact but the basic structure of connectivity between modern metropolises fits comfortably within Braudel's (1992: 2627) description of sixteenth- to eighteenth-century world-cities with their nascent capitalist elites. To explore connectivity in less complex societies, I turn to ethnohistoric accounts from eastern Panama.

Esoteric knowledge and the Cuna

Helms (1988) provides an example from sixteenth-century Panama where long-distance exchange forms the basis of unequal power relations. Unequal relations among the Cuna were not based solely on the procurement of material goods, but were equally dependent on the acquisition of esoteric knowledge. Based on early Spanish accounts, Helms describes seven paramount chiefdoms. Each chief lived in his principle city, and his territory was located on a major transportation artery. These chiefdoms were often surrounded by minor dependent chiefs who all traded and went to war with each other. Cuna trade was predominantly in shells from the Atlantic coast, pearls from the Pacific coast, gold from the highlands, woven cotton cloth, pottery, agricultural products and slaves.

Political power was established and maintained among the Cuna by travelling to distant Columbia to acquire arcane knowledge. Knowledge can itself be viewed as a commodity that is exploited for political ends (Braudel [1949] 1972: 365–68; Helms 1988: 118–19; Kristiansen and Larsson 2005: 49). In the early twentieth century, there was a hierarchy of knowledge in Cuna society. Village chiefs learned a distinctive language, but chiefs with regional influence were better versed in matters of lore and ritual. Knowledge was compared at political occasions and functioned in the same manner as any other scarce goods (Helms 1979: 128). Cuna elites travelled to northern Columbia to be schooled in religion, medicine, history and leadership skills.

Traveling to distant lands to acquire arcane knowledge and returning with exotic prestige goods was a significant source of social capital among the Cuna. In Mesoamerica, a similar role for objects executed in the Olmec style has long been proposed (Coe 1965; Clark 2007; Drennan 1976: 357–58; Earle 1990: 75; Flannery 1968: 6; Grove 1970: 32).

A cultural archipelago

The other side of modern globalization is the separation between centres of population. Manhattan and London are clearly nodes of commerce and finance today, but they also share a common international culture. Stroll through either city and you will see the same designer brands, the same luxury cars, hear the same dizzying mixture of languages and be exposed to a wide range of religious and political views. Move 100 km out of each centre and you enter a world apart. Television and the internet blunt the urban–rural contrast somewhat (by bringing more information to the latter), but even so there are marked cultural differences. It is not particularly original to note that rural people are likely to be more conservative and religious than urban dwellers and that the inhabitants of each tend to vote differently. Wealthy urban dwellers in New York, Chicago or Los Angeles as well as those in London, Paris and Amsterdam inhabit cultural islands and share more with each other than many of the peoples who surround them. Voting patterns in recent US elections provide a striking example of this cultural archipelago, with islands of Democratic voters located in population centres separated by a sea of more conservative Republican voters (Figure 3.2.2). Rural farmers in Pennsylvania and the British

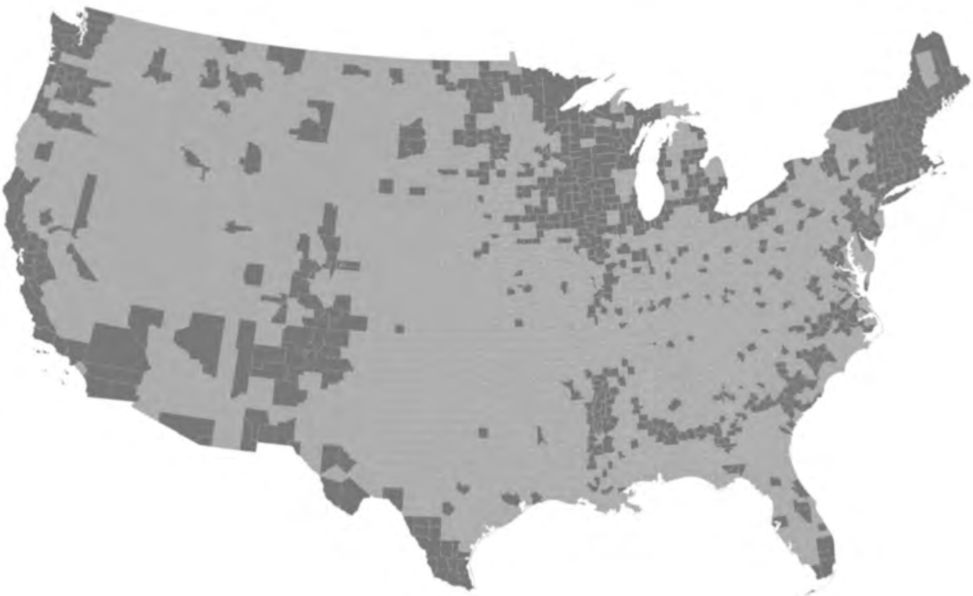

Figure 3.2.2 Map of US voting patterns by county in the 2008 federal election: darker areas are Democratic counties and lighter areas are those that voted Republican. Note that population centres form islands of counties that voted Democratic in a sea of Republican voting counties

(*Source*: www-personal.umich.edu/~mejn/election/2008/countymapredbluer1024.png, accessed 2 June 2014)

Midlands share cultural characteristics with each other compared to their big-city neighbours. This is true across the globe today, with London and New York being just two of the larger centres and Mexico City, Mumbai, Tokyo and other world-cities could be added to the list.

Braudel and Upham: cultural islands and 'empty' spaces

Braudel (1992) employed the term 'Archipelago of Towns' to describe the spottiness of innovation in medieval Europe against a sea of backwardness. The analogy is to a network of cultural islands, forming an archipelago of interaction across Europe and is similar to the modern American cultural archipelago I have just described. Even in eighteenth-century England and Holland, there were extensive regions of the countryside surrounding London and Amsterdam where people lived by hunting and fishing as they had for millennia (Braudel 1992: 42–43). Any region will realistically contain a mosaic of peoples with different adaptations, dazzling centres and vast interstices.

Upham (1992) has focused attention on the interstices of an interconnected world. Vast swaths of land that appear to be empty – such as the Desert West macro-regional system of the southwestern United States – were actually occupied by hunter-gatherers not tied into regional systems. During the second millennium BCE, along with sedentary villagers that used Olmec-style imagery, less sedentary peoples were present in Mesoamerica, and probably quite common (Arnold 1999; Inomata *et al.* 2015; Kennett *et al.* 2006: 104–05; Neff *et al.* 2006: 308; Rosenswig 2011, 2015). From 1900–1000 BCE, sedentary villagers went from an anomaly to the most pervasive settlement-subsistence strategy across Mesoamerica (Clark & Cheetham 2002). The implication of this proposal is that, when studying early sedentary Mesoamerican peoples we should assume that they were surrounded by groups of people who maintained an adaptation characterized by residential mobility, minimal ceramic use and lack of Olmec-style artefacts.

One way that mobile peoples can be understood is in terms of their effect on inter-regional interaction. From the perspective of sedentary villagers, they 'often pose significant logistical obstacles to travel, trade, and communication' (Upham 1992: 149). Knowledge of such peoples, as well as their customs and languages, would have been as important to those people engaged in inter-regional trade as would the knowledge of the actual routes to get from one sedentary island to another. The ability to travel between distant islands of complexity was likely one reason why those with the skills to do so gained prestige when they returned home bearing exotic goods, familiarity with foreign customs and possessing desirable esoteric knowledge. Knowledge of travel routes, the languages and customs of people along the way, as well as personal relationships with people in other sedentary islands, would have all been the domain of emerging elites. Just like modern economic and cultural elites who possess more knowledge of (and ties to) distant lands, I argue that so too did those in ancient Mesoamerica.

Second millennium BCE Mesoamerica as an archipelago of complexity

The globalized nature of Early Formative period Mesoamerica has long been acknowledged. In the years prior to the publication of Wallerstein's (1974) seminal book, but long-after Braudel ([1949] 1972) began publishing his three-volume treatise, Rathje (1971) proposed a 'core-buffer' model of inter-regional economic interaction to explain the emergence of complexity among the Gulf Coast Olmec and lowland Maya. Over the past 40 years, the variables that Rathje discussed have been re-evaluated. In fact, agricultural dependence had not been fully developed until after 1000 BCE (Blake 2015; Clark *et al.* 2007; Rosenswig *et al.* 2015).

In addition, Rathje's model cannot explain why some of the most intensive Early Formative period interaction was between the Gulf Coast and the Soconusco, as both regions contain roughly the same environments and resources.

Prior to the publication of Rathje's paper, Flannery (1968) modelled long-distance interaction with Gulf Coast societies from the perspective of an emergent elite in Oaxaca (but see Flannery and Marcus 1994: 389 for a change of heart). He proposed that external relations were used to bolster internal, elite-status differentiation in both regions. Flannery's model emphasizes that the inter-regional exchange of prestige goods can be fundamental within distant yet interacting regions. The self-interest of leaders in both regions therefore provides the impetus for long-distance trade of material goods as well as the potential for exchange of technological knowledge, innovative methods of social organization and religious practices. In terms consistent with world-systems or globalization theory, he posits that 'the overall function of the whole system may have been to create one big economic sphere where previously many small ones had existed' (Flannery 1968: 108).

My proposal is that second-millennium BCE Mesoamerica be understood as a constellation of islands of more sedentary, ceramic-using peoples that formed a cultural archipelago among a sea of less sedentary foragers (Rosenswig 2010: 13–46, 2011). The islands of complexity model attempts to include the 'empty' regions without Olmec-style pottery and figurines. It also updates Rathje's (1971) cultural ecological assumption that agriculture provided the engine of cultural change. Forty years ago, archaeologists did not realize the antiquity of food production in Mesoamerica or the slow manner in which it impacted political organization (Rosenswig 2012, 2015).

The Archaic-Formative transition was not a temporally uniform occurrence in Mesoamerica. One of the better known, non-sedentary, adaptations that persisted throughout the Early Formative period was that of the inhabitants of northern Belize, where ceramic use and village life were only adopted at the very end of the second millennium BCE (Loshe 2010). One reason why the pre-ceramic peoples in this area are known is that they lived near a source of high-quality chert, which they used to make distinctive tools (Rosenswig *et al.* 2014). Other non-ceramic-using peoples have likely gone undocumented in much of Mesoamerica during this time (Inomata *et al.* 2015). Evidence from the Maya lowlands provides much of the 'empty' sea defining the islands of villagers using Olmec-style objects sprinkled across the early Mesoamerican world at the time. However, I push the analogy further by arguing that mobile foraging peoples lived in and around ceramic-using villagers in all parts of Mesoamerica.

San Lorenzo

A cultural and demographic island

Disagreement over the nature of the San Lorenzo Olmec is more semantic and typological than substantive. Graduates of the University of Michigan argue whether San Lorenzo was a complex chiefdom or an archaic state (Clark 2007; Spencer and Redman 2004). This is the continuation of a disagreement over whether San Lorenzo was the 'mother' or simply one among a handful of equally precocious 'sister' cultures (Sharer and Grove 1989). Yet, however one classifies the residents of the Gulf Coast, the site of San Lorenzo covered more than 500 ha, making it far larger than any other site in Mesoamerica from 1400 to 1100 BCE. Further, 126 of 226 sites documented through survey are located in the immediate vicinity of San Lorenzo, resulting in a population density 20 times higher than the rest of the Coatzacoalcos survey zone (Symonds *et al.* 2002: 65–66). No one I am aware of debates these facts, and so San

Lorenzo was the largest population centre anywhere in Mesoamerica at the time – regardless of how it was organized politically (Pool 2007: 175–76).

The concentration of people around San Lorenzo during the height of its power was also unique on the Gulf Coast. Smaller centres existed to the east around what would later be La Venta (Rust 2008) and to the west where Tres Zapotes would subsequently develop (Pool *et al.* 2010). However, nothing of comparable size to San Lorenzo existed anywhere on the Gulf Coast. In fact, Arnold (1999) describes the residents of La Joya in the Tuxtla Mountains (see Figure 3.2.1) as being semi-sedentary, with little investment in houses or storage facilities. He argues that without ceramic vessels and figurines, the residents of La Joya would be indistinguishable from mobile foragers that had previously occupied the area and still existed in large swaths of the lowland Maya area. Even closer to San Lorenzo, settlement survey in the San Juan Basin area documents that settlements followed sources of permanent water and upland zones were not occupied by ceramic-using peoples until after San Lorenzo's collapse (Bornstein 2001). La Joya was only a two-day walk to San Lorenzo and the San Juan Basin area half that. This arrangement of the largest population centre being surrounded by less sedentary and less aggregated peoples is consistent with Braudel's (1992) characterization of urban islands. Demographically, San Lorenzo was a population island.

The colossal basalt heads, for which the Gulf Coast Olmec are best known (Figure 3.2.3), had no equals among contemporary Mesoamerican symbols of power and nor did the thrones or other stone monuments (Cyphers 2004). Flannery and Marcus (2000), ardent proponents of the sister-culture perspective, acknowledge the uniqueness of San Lorenzo's sculpture in Mesoamerica but note that they are comparable in size and labour requirements to those made on Easter Island. While this comparison may well be accurate, it would only be relevant to the interpretation of Mesoamerica if the residents of Easter Island and San Lorenzo were in contact with each other. As they were not, the comparison highlights the fact that the colossal heads, thrones and other monumental stone sculptures were novel and exceptional in Mesoamerica at the time. San Lorenzo was therefore unique in terms of public political expressions. Does this make the site the centre of a chiefdom or a state? I do not know and frankly do not really care.

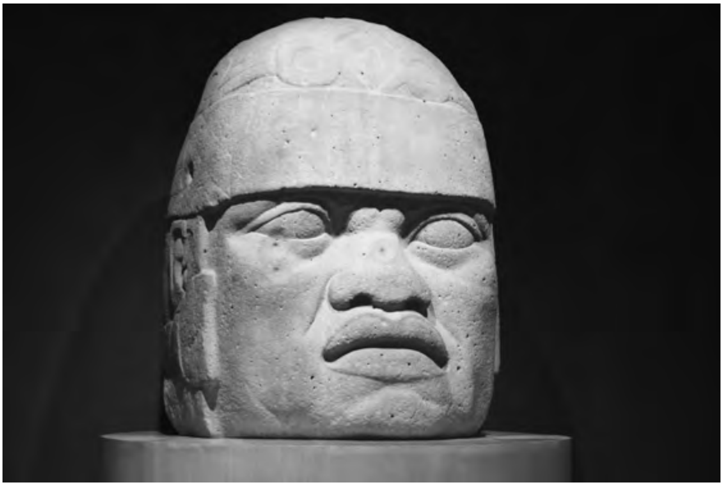

Figure 3.2.3 San Lorenzo colossal head #6 measuring 1.67 m in height. Photograph by author

What it does mean, however, is that public claims for the importance of the individuals depicted had no parallel in Mesoamerica at the time. San Lorenzo was therefore unique both in terms of demography and the glorification of a small group of individuals. Given these two uncontested facts, it is somewhat surprising that the interpretation of San Lorenzo continues to generate so much controversy (e.g. Blomster *et al.* 2005; Clark 2007; Flannery and Marcus 2000; Flannery *et al.* 2005).

Obsidian

The trade of obsidian is little discussed in arguments over how to interpret San Lorenzo. This useful resource was mined from a dozen highland sources and recovered from all villages across Mesoamerica (see Figure 3.2.1). The third characteristic that makes San Lorenzo unique is that it was the epicentre of an obsidian exchange network that spread north and west to the Mexican highlands and south to the Guatemalan highlands (Hirth *et al.* 2013). Obsidian was traded widely, but San Lorenzo was unique at the time as it was the only site to which both Mexican and Guatemalan obsidian was transported. Therefore, in addition to being the largest population centre and having the most impressive and labour-intensive symbols of power, San Lorenzo was also the focal point of the long-distance, obsidian exchange system.

Much has been made of the exportation of ceramics from San Lorenzo to elsewhere in Mesoamerica (Blomster *et al.* 2005; Stoltman *et al.* 2005), but this is much less important in determining the site's centrality in the late Early Formative period Mesoamerican world. Today, it is not exports that are a testament to a nation's economic might but instead what it imports. The lion's share of goods produced in China, Latin America and Southeast Asia are shipped to North America and Western Europe – a clear indication of the importance of these wealthy countries. A trade deficit is the clearest proof of power, as imports are real benefits that increase an importing nation's standard of living (Mosler 2010: 59–62). China makes consumer goods for wealthy Western countries and in exchange receives these countries' currencies that are then deposited in the very same countries' banks. Likewise, OPEC countries send oil, receive Western currencies and also hold them in Western banks. In fact, much of these saved currencies will not (and in fact cannot ever) be spent, so the exporting countries will never actually receive compensation for their work or raw materials. In the case of Early Formative Mesoamerica, the unidirectional flow of obsidian provides economic proof of the power and centrality of those inhabiting San Lorenzo.

The sedentary peoples across the Gulf Coast all used black and white ceramics, particularly the distinctive white-rimmed black wares from 1400 to 1000 BCE. Further, the so-called baby-face figurines and the first Mesoamerican experiment with abstract iconography were also found across the Gulf Coast at this time. No one argues that these Olmec elements were found from central Mexico to eastern Honduras (Pool 2007). The presence of distinctively decorated ceramic objects is the basis of defining the late Early Formative period in every region's ceramic chronology (Henderson 1979; Rosenswig 2010: 57–59). Due to the nature of how ceramic phases are defined and the error range of C14 dates, it is not possible to determine where these objects first originated. It appears that they sprang up simultaneously across Mesoamerica at 1400 BCE and we will likely never know for certain where baby-face figurines were first imagined nor who originally came up with the idea of abstract iconography. However, as I have argued elsewhere (Rosenswig 2010: 182–83), the fact that white-rimmed black ware ceramic vessels continued to be produced in the Gulf Coast until the Classic period suggests that this region was the style's source. In virtually all other areas (except for some neighbouring regions of Chiapas), white-rimmed black ware vessels are not documented after 1000 BCE, and so, serve as a convenient horizon marker with which to define the late Early Formative period. These distinctly decorated dishes come into fashion and then cease being used everywhere but the Gulf Coast. Therefore, their persistent use for two millennia in the Gulf Coast indicates that this was more than a passing fad. As white-rimmed black wares employed a specific firing technique and resulted in a distinctive aesthetic, I argue that the Gulf Coast was their place of origin and it is from here that they were emulated elsewhere. Like Marlboros, Coca-Cola or McDonald restaurants, even when manufactured locally these products still maintain reference to the United States.

Soconusco

Located on the Pacific coast of Chiapas and Guatemala, the Soconusco is defined by geography on all sides. To the southwest is the Pacific Ocean, to the northeast are the Sierra Madre and to both the northwest and the southeast are the large Cantileña and Manchón estuary-swamp systems (Lesure 2011; Pye *et al.* 2011; Voorhies 2004: 6–21). The relatively small area defined within these geographic limits has the greatest concentration of fertile land on the Pacific coast of Mesoamerica as well as two enormous and tremendously rich estuaries. It is thus not surprising that many of the significant early cultural developments transpired in this region.

A cultural and demographic island

Beginning at 1900 BCE, the Soconusco was a cultural island with some of the earliest documented ceramic-using villagers in Mesoamerica. In the northwest part of the Soconusco, discoveries around Mazatán provide one of the earliest examples of rank society in Mesoamerica amongst a network of interacting elites (Blake *et al.* 1995; Clark and Blake 1994). Early villages were located on the coastal plain and larger sites (such as Paso de la Amada) established near swamp margins and away from major rivers. At this early time, the Soconusco functioned as a demographic island with relatively high population, as well as shared ceramic and figurine styles, extending to the southeast as far as at the La Victoria, Salinas la Blanca and Cuauhtémoc sites (Coe 1961; Rosenswig 2010: 106–14).

Many aspects of life changed across the Soconusco after 1400 BCE. At Paso de la Amada, platform mounds occupied by the traditional elite were abandoned and new mounds were built. A century later, Paso de la Amada and other Mazatán polities were abandoned and the political centre of the region shifted to Cantón Corralito. Recent work by Cheetham (2009, 2010) provides evidence of intensive interaction with inhabitants of San Lorenzo – at both sites, identical ceramic vessels and figures were decorated with the Olmec style. Clark and others (Clark 2007; Clark and Pye 2000) have long proposed that ideological transformations, evidenced by the use of Olmec style, were due to local elites forging ties with the distant political centre of San Lorenzo and that these distant allies exerted direct political control over Cantón Corralito. At the other end of the Soconusco cultural island, the Cuauhtémoc site was occupied throughout the Early Formative period and during the second part of the Early Formative, ceramic figurine and vessel styles changed in tandem with those in the Mazatán zone (Rosenswig 2010). White-rimmed black wares, baby-face figurines and the abstract iconography documented in the Soconusco at this time (Figure 3.2.4) were very similar to that from the Gulf Coast. Symbolic and demographic patterns indicate that this region between the two Soconusco swamps functioned as a cohesive cultural area throughout the Early Formative period. If changes were due to expansionary political meddling by Gulf Coast elite or not, the peoples of the Soconusco and Gulf Coast were clearly in regular and direct contact in a manner very different than any intervening peoples.

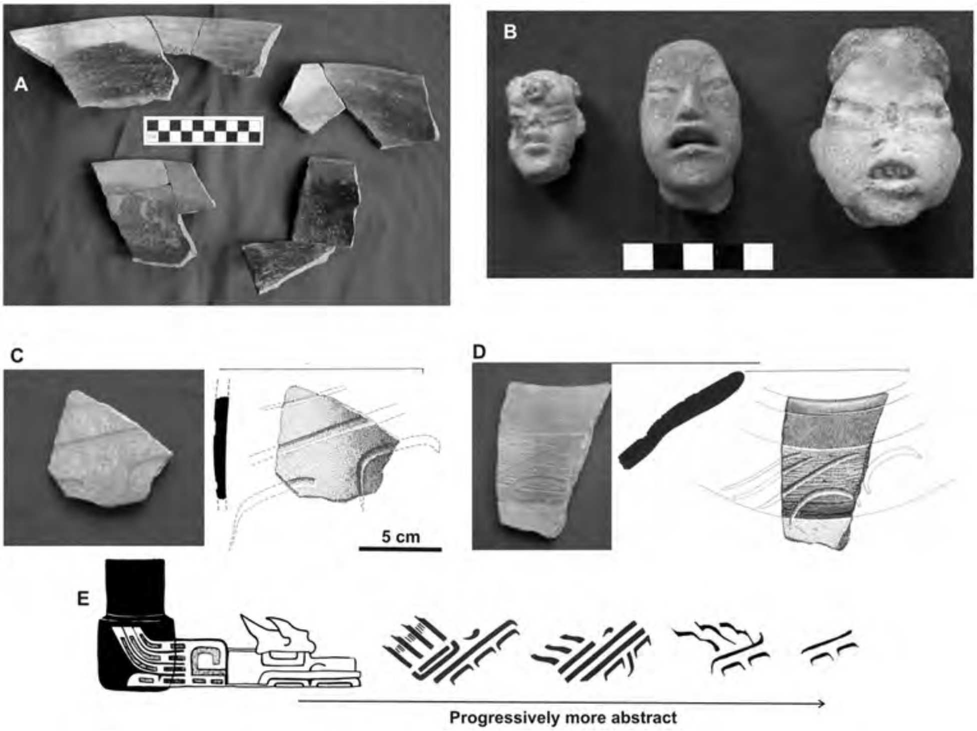

Figure 3.2.4 Olmec imagery from Cuauhtémoc: (a) white-rimmed black ware serving vessels, (b) baby-face figurines and (c) abstract iconography on a Culebra Gray vase and (d) a Mendez Red neckless jar as well as (e) increasingly abstract representations of the Olmec Dragon. Photographs by author Moreno

The Soconusco was a demographic and cultural island, with areas around it having much sparser settlement. To the southeast, only pockets of ceramic-using peoples are documented beyond the Manchón swamp. Arroyo (2004: 75–76) describes the Early Formative period occupation of the central Guatemalan coast as consisting of single mounds located in the estuary and spaced out every kilometre. She interprets this as the remains of a non-sedentary adaptation (Arroyo 1999: 191–94). Recent excavations in the area document that these single mound sites in the estuary contain ceramics vaguely related to the Cuadros complex and contemporaneous radiocarbon dates (Arroyo *et al.* 2002: 39–41). Investigators conclude that this was a distinct ceramic tradition, particularly as no Cherla-phase materials have been documented (Arroyo *et al.* 2002: 43–47). Farther southeast, micro-regional discrepancies in evidence of forest clearing and maize pollen during the Early Formative period are interpreted as the result of proximity to known sites (Neff *et al.* 2006: 298). This intra-regional variability is consistent with a low population density that resulted in very localized impact on the environment.

The northwest side of the Soconusco cultural island is also quite clearly defined. Cherla- and Cuadros-phase occupation is documented at Los Cerritos within the Cantileña swamp (Kennett *et al.* 2002). Beyond this, however, Early Formative period occupation was sparse (Kennett *et al.* 2006: 133; Voorhies 1989). The well-known site of Pajón consists of 11 mounds spread over a 2 km area and is located northwest of the Cantileña swamp (Paillés 1980). The function of Pajón was not domestic and Paillés (1978: 88–90) proposes that it was a special purpose resource extraction site with little evidence of a permanent occupation or food production. No contemporary late Early Formative sites from the coastal plain are known in this area. Although considerably less work has been undertaken here than in the other areas discussed above, the lack of Early Formative sites suggests a distinctly different occupation than between the large swamp systems. The Early Formative adaptation northwest of the Cantileña swamp *does however* appear to have been similar to the one proposed by Arroyo for the central Guatemalan coast. Low population levels and specialized occupation of the estuary zone on both sides thus appear to define an intervening Soconusco island of Early Formative complexity. The Early Formative period concentration of population in the Soconusco was bracketed by peoples inhabiting the coastal plain on both sides who left a distinctly simpler settlement pattern of disperse estuary mounds and lived at a lower population density. Preliminary results from survey of the nearby piedmont around Izapa (Rosenswig *et al.* 2013) indicate very little occupation during the Early Formative period and this highlights that the Soconusco coastal plain – containing Paso de la Amada, Canton Corralito and Cuauhtémoc – was a demographic as well as a cultural island.

Obsidian

There is no ecological explanation for the intensive contact documented between the Gulf Coast and the Soconusco, as both regions had the same environment and resources. However, the Soconusco may have been involved in acquiring El Chayal obsidian from the Guatemalan highlands and moving it to San Lorenzo. As noted above, obsidian was transported from both the Guatemalan and Mexican highlands to San Lorenzo. El Chayal was by far the most common source of Guatemalan obsidian at San Lorenzo during both the Early and Middle Formative periods (Hirth *et al.* 2013). Obsidian was travelling from Guatemala to San Lorenzo even prior to 1400 BCE and continued after its collapse. The significance of the Gulf Coast demand for El Chayal obsidian can be documented indirectly by its scarcity in other parts of Mesoamerica. For example, Nelson (1985) suggests that the almost exclusive use of San Martín Jilotepeque obsidian by the inhabitants of the Maya lowlands during the Middle Formative period was the result of a monopoly over the El Chayal source by the inhabitants of coastal Chiapas who were transporting it to the Gulf Coast (see Clark and Lee Jr 1984). During the Early and Middle Formative Lagunita and Golfo phases, El Chayal and Guadalupe Victoria obsidian were the dominant types of obsidian recovered from Laguna Zope (Zeitlin 1978), another island of complexity located between the Soconusco and San Lorenzo (Figure 3.2.1). This means that, although the El Chayal obsidian was rare across certain areas of Mesoamerica, a significant quantity made its way to the south side of the Isthmus of Tehuantepec. This is exactly what would be expected if obsidian was being transported from the Guatemalan highland sources to the Gulf Coast along the Pacific coastal route.

Obsidian patterns from within the Soconusco cultural island elucidate the role of this resource in extra-local exchange relations. Clark *et al.* (1989) document a decrease in the overall quantity of obsidian at sites in the Mazatán zone during the second half of the Early Formative period. They propose that the large quantity of obsidian chips, with no sign of use-wear, recovered during the Locona and Ocós phases were distributed by emergent chiefs at feasts. They interpret the subsequent decrease in the quantity of obsidian during the second part of the Early Formative as being due to the replacement of obsidian gifts by objects with Olmec imagery. Obsidian data from Cuauhtémoc replicate this pattern (Rosenswig 2010: Table 7.1). In addition to a drop in the overall quantity of obsidian, the mean size of obsidian was also relatively smaller at Cuauhtémoc during the second half of the Early Formative period than before. A decrease in the average size of obsidian could be the result of more intensive use of this raw material

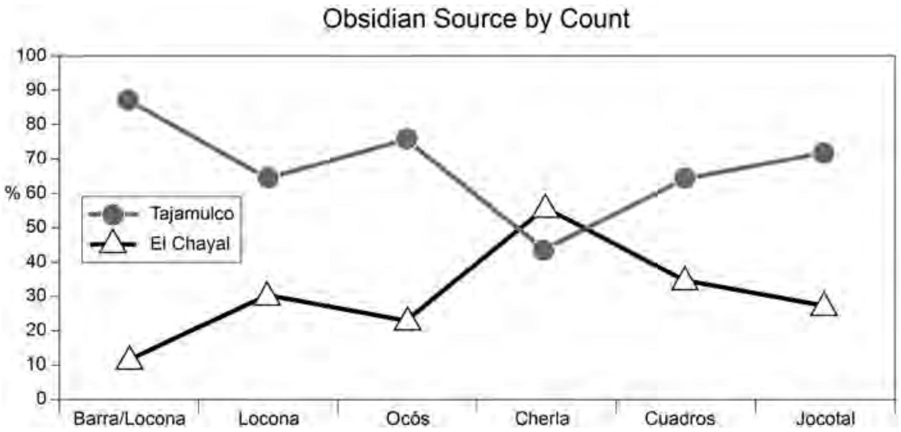

Figure 3.2.5 Relative proportions of Early Formative obsidian from Cuauhtémoc (based on Rosenswig 2010: table 7.1)

for functional use (cutting tools) rather than political purposes (gifts distributed at feasts). This pattern is consistent with Clark *et al.*'s (1989) argument for the Mazatán zone and suggests that changes in obsidian use from a prestige to a functional import after the Cherla phase was a regional phenomenon across the Soconusco (Rosenswig 2010: 235–40).

Over 99 per cent of all obsidian recovered from unmixed midden contexts at Cuauhtémoc came from two Guatemalan sources: Tajumulco and El Chayal (see Figure 3.2.1). Tajumulco obsidian is an opaque grey colour, pitted and full of impurities. Material from this source is difficult to work and was seldom used to produce prismatic blades (Clark *et al.* 1989: 272). In contrast, El Chayal obsidian is transparent to translucent, with varying patterns of black banding and is of a high quality. Cherla-phase obsidian patterns from Cuauhtémoc stand out as El Chayal obsidian represents almost 60 per cent of that recovered (Figure 3.2.5). In contrast, Tajumulco obsidian formed slightly more than 40 per cent of the overall assemblage during the Cherla phase – compared to 70 per cent during the previous Locona and Ocós phases as well as during the following Cuadros and Jocotal phases. Obsidian from El Chayal accounted for almost 75 per cent of the obsidian used at Mazatán sites during the second half of the Early Formative period (Nelson and Clark 1998: 285). The drop in the proportion of El Chayal obsidian at Cuauhtémoc during the Cuadros and Jocotal phases might be due to the increased importance of exporting this high-quality material to San Lorenzo. Basic cutting needs of Cuauhtémoc's residents were fulfilled with obsidian from the closer Tajumulco source as had been the case during the first half of the Early Formative period. This would leave relatively more of the higher-quality El Chayal obsidian to be exported. Zeitlin (1990) makes a similar argument to explain the drop in the quantity of *Spondylus* shell recovered from Laguna Zope, on the Pacific Coast of Oaxaca, as being due to the demand for this prestigious raw material by the residents of Monte Albán. In both cases, foreign demand may have affected local consumption patterns.

Flow of information between cultural islands

Many local developments in Mesoamerica's cultural islands occurred as the result of elite participation in a system of inter-regional relationships. The Cuna example presented at the beginning of this chapter suggests how the dynamism of an elite emulation system is often driven by the existence of a more developed distant centre. Political competition is fuelled as local elites seek out foreign objects and exotic ideas. Flannery originally proposed that 'the areas most likely to form exchange systems with, and truly emulate the behavior and symbolism of, the Olmec were not the least developed regions of the highlands, but the most developed' (1968: 106). Early second-millennium BCE communities in Mesoamerica such as the Soconusco can be conceptualized as a preexisting archipelago of cultural complexity. This initial cultural archipelago was strengthened (or globalized) after 1400 BCE due to the emergence of the political phenomenon on the Gulf Coast and, among other things, the demand for obsidian.

The idea of an archipelago of complexity helps to describe the large areas (such as the entire Maya lowlands) that were devoid of Olmec iconography, or other signs of external contact, until after 1000 BCE. A lack of Olmec iconography is thus interpreted as a lack of interest in (and equally important, a lack of interest from) people in these regions. Not only were the inhabitants of such areas politically and economically uninteresting to elites in other areas, but they could also be dangerous, thus adding to the prestige of those who travelled through their lands to bring back exotic goods and ideas. During the Early Formative period, the Gulf Coast and Soconusco can be envisioned as two islands in a cultural archipelago that also included the Valley of Oaxaca, the Basin of Mexico and the Copan Valley (Figure 3.2.1). The Soconusco and Gulf Coast were separated by the Sierra Madre, the coastal desert of Oaxaca and the less fertile northwestern half of Chiapas, yet residents of the two areas remained in close enough contact that manufacturing details of food serving vessels were maintained for over two centuries.

Summary thoughts

As Feinman (this volume) makes clear, globalization has long been studied by archaeologists as inter-regional interaction. That is, the relationship between the local and the distant. In this chapter, I draw inspiration from Helms' (1988, 1993) accounts of Cuna travel to Columbia to acquire prestige and esoteric knowledge. This type of prestige-getting fuelled the engine of inter-regional travel for which exchange of utilitarian goods was a byproduct. Simple exchange of goods that are not locally available (such as obsidian) fails to explain why the most intensive interaction currently known in Mesoamerica from 1400 to 1000 BCE was between the Gulf Coast and the Soconusco – two regions with identical local resources. I also invoke Braudel's (1992) idea of an archipelago of cultural islands and Upham's (1992) attention to the 'empty' spaces that separate them. I argue that this describes second millennium BCE Mesoamerica where discrete concentrations of sedentary peoples using Olmec imagery were separated by regions with more mobile foragers. Islands of complexity are similar in structure to the modern world system, where centres of commerce and cultural innovation such as New York and London are more closely linked to (and have more in common with) each other than the peoples who immediately surround them. The distribution of people and the urban–rural divide provides a productive way to use our experience in the modern world to think about the ancient Olmec of Mesoamerica. People in physical proximity do not necessarily share similar cultural values or forms of material culture. In general, those in large centres tend to be more connected to other distant centres and together cultural change occurs more rapidly. Further, population centres tend to draw people into them from the surrounding countryside. This was true of the Neolithic and Urban Revolutions (Childe 1951), and also true of the Industrial Revolution that Marx and Engels were analysing during the nineteenth century when they anticipated the inevitability of globalization. The world is currently connected to a degree never before imagined and urban areas absorb people from the countryside. Rather than being unprecedented, modern globalization is part of a millennia-long phenomenon of long-distance interaction.

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3.3

On the horizon

Art, valuables and large-scale interaction networks in the ancient Andes

George F. Lau

Introduction

Globalization can be understood as ‘complex connectivity’ that leads to dense networks and interdependencies (Jennings this volume, Knappett this volume). This, in itself, is principally a descriptive understanding modelled on a singular example. And blunt application and comparison may lead to teleological ascription for past societies – in a similar way that much archaeology that trains on social types (e.g. states, empires) often wilfully relies on material correlates and tick box traits. What can be less prescriptive a method, and probably what regional, prehistoric archaeologies are more geared to address, is to characterize how complex connectivity is transformative and how it is constituted. The latter should be in several senses of the term: first and foremost in past socio-cultural reconstruction, but not excluding its status in modern epistemology, which reflects as much on dominant scholarly apparatuses as it may on past social systems.

The strict definition of ‘globalization’ would have it apply only to the formation of the modern global system (Robertson this volume). Globalization’s form is fairly well recognized, even if that form is colossal and its workings are complex and multi-faceted. Smaller globalization-like phenomena occurred in the past and are more numerous, but their form and workings are less clear (Jennings 2011; Knappett this volume). What remains crucial is greater exploration about how to discriminate globalization from other like phenomena. Scholars probe for empires, archaic states, colonialism, core–periphery, interaction spheres, and other kinds of socio-economic arrangements that occasioned the extensive spread of artefacts, goods and material styles. Certainly, these are not the same things. But it is equally fair to say that the archaeological record, rich as it is, is already heavily taxed to derive correlates to distinguish them, in both typological and topological senses. Most of the criteria for discerning the above categories may be quite similar and interpretations risk equifinality.

For examining the transformative and constituted nature of large-scale socio-cultural interaction, I wish to highlight the term ‘horizon’, especially in describing forms of connectivity that are similar to globalization. ‘Horizon’ is a largely disused cultural historical notion today, but is taken to mean a brief period of time characterized by cultural integration over a large

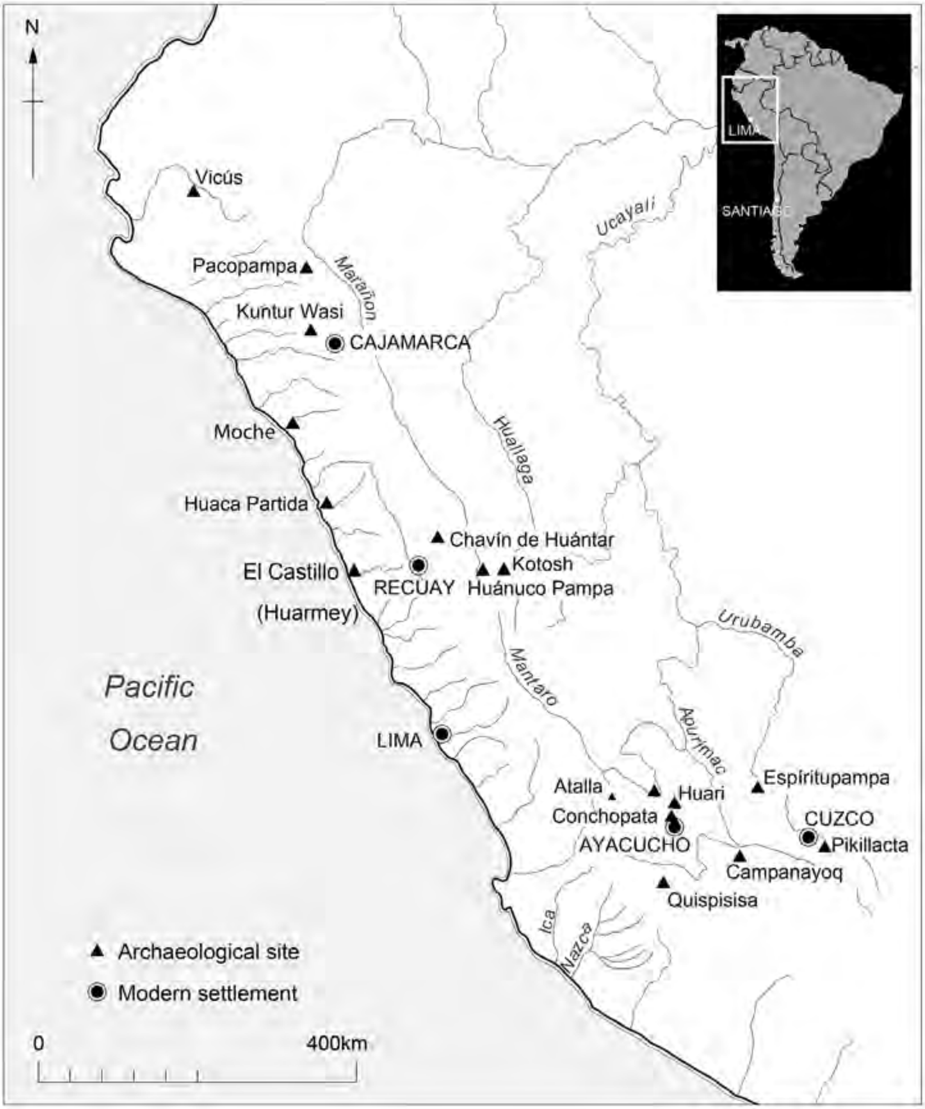

Figure 3.3.1 Map of Central Andes, showing places mentioned in the text

region (Rice 1993; Rowe 1962; Willey 1948). It should not be forgotten that 'horizon' already embeds consideration of process, integration and notions of spread and the diachronic (keyed to material culture) – components critical to any realistic evaluation of globalization in prehistoric archaeology. Just as important, it provides a ready space to compare different configurations and strategies of large-scale interaction networks during the periods in question.

In archaeology, cultural expansions have typically been examined as the outcomes of increasing social complexity. In trying to reconstruct the political economies crucial in complexity, I would argue that much of 'the cultural' has been underemphasized, not least in considerations of Andean South America (Figure 3.3.1). This is paradoxical, since the Andean horizons, the time periods for which globalizing processes are probably most discernible, are first and foremost cultural historical constructs. The *raison-d'etre* of 'horizon' is the rapid and widespread uptake of particular kinds of cultural things. For the pioneers in Andean chronology-building, functional interpretations came after basic culture history. That is to say, what it was (e.g. state, empire, cult) resulted after descriptions of 'when?' and 'how configured in material terms?' (e.g. Kroeber 1944; Larco Hoyle 1948; Rowe 1962; Willey 1948).

To identify 'globalizing' patterns in the Central Andes, this chapter focuses on the Early, Middle and Late Horizons, associated with the Chavín, Wari and Inca cultures, respectively. It seeks to compare the periods' widespread connectivity, which I take as the cultural understandings of connections between individuals and groups, as shaped by material things and associated practices. First, I will argue that certain kinds of material culture (mostly things I will treat as 'valuables' or 'artworks') were crucial to and indeed generative of the three periods of increased connectivity. These are simply glosses I use for rare or finely made materials that are usually portable, visually impressive and highly desirable. At different stages of their social lives, they can be transacted as items of value (Appadurai 1986; Graeber 2001; Papadopoulos and Urton 2012). Second, great demand for such special objects and ensembles of objects increased interculturally during the periods in question. Finally, the appeal and consumption of these objects engendered shared perspectives and value systems.

My broader position is to argue that certain groups committed to, willingly or partly through coercion, participation in wide-scale aesthetic systems, which counted as a vital feature in each period's interregional connectivity. This occurred, in large part, to engage peoples and cultures within interregional systems of meaning. The process occurred most often via local elites, and the formation of these networks was essential to the appeal and the spread of 'horizon styles'. Thus, globalization in the ancient Andes, if anything, was a synergistic process that networked people with culturally salient material culture.

Globalization, connectivity, material culture

In exploring the relevance of globalization for the ancient Andes, it is useful to itemize what Amerindian societies did not feature, before we identify common ground. First, before the Europeans, the Americas lacked major forms of intensive transport (e.g. by ship, rail, wheel-based, air). This, by nature, oriented the kinds and intensity of interchange. Also, there was never a capitalism-led economic system. There were no currencies like those of the Old World, and what markets existed behaved very differently. Communication systems (internet, news media, telephony, voyaging) driving economies of desire (what people want and will part with to get) between regions were uneven at best. In short, many of the key forces and traits of globalization did not exist in the Americas before Columbus.

The processes of cultural expansion and materials interchanges, nevertheless, are illuminated by historical cases of colonialism and globalization. In diverse contexts of cross-cultural encounter, the exchange and consumption of material culture are often accompanied by major transformations in how they are engaged with, both physically and cognitively (Clifford 1997; Dietler 2010; Gruzinski 2002; Miller 1997; Myers 2001; Stein 2005; Taussig 1993; Thomas 1991; Wengrow 2014). Especially crucial here is the strong mediatory role of material culture in social transformations. Material culture is both the expression of globalizing process and often the engine for it. One need only think of gold, sugar, the internet and mobile phones. This results, at least in part, because material culture often is accompanied by new knowledges that are also transacted, negotiated and internalized as part of the connectivity.

Knappett (this volume) has usefully identified key 'tools' or measures to evaluate the interregional connectivity of networks, namely: frequency, strength, content and directionality. These serve as axes that comprise and qualify forms of connectivity, but how they are configured can vary greatly. If they are instrumental at all as tools, it is because the axes can be compared; the heart and promise of globalization thinking reside in the practice of comparison.

I would add that there is room to help define connectivity's temporal dimensions. In addition to Knappett's 'frequency', other important temporal patterns include rhythms (e.g. within one period of connectivity), duration (e.g. how long?), and cycles (e.g. comparing multiple periods). Such temporal dimensions are vital to systematize, not least because of the diachronic emphasis in archaeology. But also, since networks and connectivities *emerge*, they should also have certain kinds of phases and pathways: they arise, flourish, transform and may ultimately fail. And if connectivity is 'densely' constituted, we should be concerned about how and when the density grows and diminishes. In short, we need to also be interested in the variability of connectivity through time.

We should also be assessing the limits of connectivity. Here, I am less referring to the spatial extension of connectivity, than to the historically contingent cultural dispositions and contexts under which connectivity develops. To a certain extent, this is similar to what Knappett (this volume) calls 'content', but I am mainly referring to that cultural framework (ideas, values, structures) which affects the desirability and intelligibility of that content. These are quite different things, even if, I would admit, archaeologists will likely find it difficult to distinguish easily between the two through the prehistoric record. What are the factors that favour connectivity? What are the permissible cultural 'limits' that regulate economies of exchange? One might see this like a kind of tolerance or economy of suitability, and elsewhere I have talked about vectors which favoured cultural expansion of material styles (Lau 2014). The limits, I believe, turn on 'regimes of value', cultural frameworks, which orient the circulability of objects (Appadurai 1986).

Put another way, another crucial axis for contextualizing complex connectivity must be the cultural frameworks that allow, foster or limit social relations, and here especially of exchange. So, for example, one might say there are high limits and 'tolerance' for turkey during Christmas in the Euroamerican world; they would be much lower during Halloween or for many parts of the world where turkey is not readily available, or for communities with poultry restrictions. The opportunities and directionality for connectivity, here, therefore vary according to time, preference, and place. Many things and ideas can be shared and circulated; others cannot, due to irrelevance, abhorrence, sumptuary laws and many other contingent factors that affect cultural practices. Connectivity rarely emerges upon a blank slate, and this is why examining durations and cycles of large-scale processes over the long term may be insightful.

Those things that occupy status as valuables have been crucial in globalization processes. We need only to remember the expeditions to the Orient, Africa and the Pacific resulting in booty, or perhaps cite Dürer's wonderment upon seeing the treasures of the New World, earmarked for European display cabinets, collections and the forge alike (e.g. Bleichmar and Mancall 2011; Greenblatt 1991).

A common way of coming to grips with the Other is through emulation; mimesis of the colonial Other marks a way for local groups to reconcile new asymmetries (e.g. Bhabha 1994; Gruzinski 2002; Taussig 1993). This is expressed through native images of the colonizer, but also the taking on of cultural habits of alterity, especially those associated with status hierarchies, such as clothes, cuisine, sports, and religious practices. Another commonality is the proliferation of 'promiscuous' material culture, things and materials appropriated and repurposed from both Western and native points of view. Exotic materials and 'entangled objects' transform local value systems but also can resist change by helping to preserve local dispositions (Thomas 1991). The flows of goods transform core societies as well; while there may be asymmetries of power, the effects of long-distance trade often impact all parties (e.g. Chase-Dunn and Hall 1991; Peregrine and Feinman 1996).

In thinking about relations of local and global interaction, some have suggested that 'worlding' can work as an alternative to 'globalization' by addressing some of its discontents – especially its tendency for a single external narrative, market inexorability, centralization/stratification, and its predication on human subjects (e.g. Smith 2011; Wilson and Connery 2008; Zhan 2009). By 'worlding', people are referring to how large systems and wholes emerge as a contingent array of diverse entities and how the process is simultaneous, but not necessarily mutual and predictably transformative. It is also interested in how local groups live, make and envision their worlds in the larger frames, how this is achieved by specific shared experience and embodiment, even as place, belonging and rootedness become destabilized through global economies, such as in the postcolonial city (Simone 2001). It is worth adding that understandings of ancient globalization (in non-Western, non-modern contexts) may also need to reconcile how other societies see the world and particularly the beings, human or not, who populate it and may participate in the complex connectivity (e.g. Descola 2010: 336).

One key domain for worldly entanglements concerns food and drink. Dietler (2010) highlights the vital role of consumption and 'culinary encounters' in colonial power relations. Consumables, such as wine, sugar and potatoes, mediated and transformed production, consumption and interaction at an interregional scale. Exotic foods become appropriated and indigenized selectively as part of social economies, both quotidian and prestige. Besides the goods themselves, this can have myriad material expressions: specialized storage and serving equipment, bodily techniques for preparation and consumption, disposal, etc. In short, foods are 'agents of change' and vital in relations of power in colonial contexts (Dietler 2010: 183–85). For the Andes, too, valuable articles facilitated the ingestion of foods and psychotropic substances; things that do corporeal work were vital in the interregional spread of all three horizons.

In brief, what typify processes of interregional contact and exchange are major reorientations of social relations, as mediated by objects. In them, objects and materials are fundamental because they articulate people and geographies in intercultural encounters. We could view these cases as a range of the conditions of possibility for how subjects are constituted via material forms. Connectivity is at the heart of cross-cultural encounters, and is significant for their durability, tenor and local purchase. I am especially interested in how foreign materials were received in native systems. Local understandings of foreign resources (both physical and symbolic) – how they are used, distributed and valued, what they are good for or not – are at play. In short, things in motion often precipitate perspectives in motion.

All three Andean horizons can be described as processes that reoriented relations between people and objects. What is perhaps useful to foreground here, for elaboration later, is how very different each horizon was in terms of the forces, relations and expressions of social power that created spaces for foreign objects and inequalities associated with 'rapid cultural expansion'. This would suggest that globalization is not a formulaic process, or necessarily due to any one variable, but rather synergies primed by historically and geographically contingent factors that are able to foster large-scale connectivity.

Time, function, horizons

Over fifty years ago, Gordon Willey argued that what spurred the rise of civilization in the Americas resided in the styles of things:

> the great styles . . . are but symbols for the religious ideologies of the early farming societies of Mesoamerica and Peru. . . . [I]n these ideologies these early societies had developed a mechanism of intercommunication, a way of knitting together the smaller parts of the social universe of their day into a more unified whole than it had heretofore been. . . . [T]he sharing of common ideologies led to the threshold of civilization by enlarging the effective social field. By this enlargement more individuals, more social segments, more local societies combined and coordinated their energies and efforts than at any time before.
>
> *(Willey 1962: 9–10)*

The 'genius' of the Olmec and Chavín horizons, specifically, was the large-scale connectivity facilitated by the interchange of desirable and ideologically potent things (Willey 1962: 10). This elegant summation recognizes processes anticipating 'globalization'. Its virtue is concepts linkable to the archaeological record: integrated styles/symbolism, shared ideology, intercommunication, prior regionalism, enlargement of the social field, and coordinated effort. These may resonate directly with several of the 'hallmarks' of globalization process (Jennings 2011: 123–41), namely 'deterritorialization'; 'standardization'; 'cultural homogenization'; and 're-embedding of local culture'.

Willey did not extend the same functional analysis to the other periods of integration in the Central Andes, and he also did not account explicitly for the speed at which 'the knitting together' occurred. These two considerations found greater purchase in scholarship by John Rowe (1962), who also championed use of 'horizon.' First advocated by Max Uhle and A.L. Kroeber, the horizon concept became widely established as a chronological framework via Rowe and his students (University of California, Berkeley). What was crucial in their formulation consisted of: units of contemporaneity (mainly shared ceramic traits), wide spatial distribution, and crucially, a relatively quick spread (Rowe 1962: 45–46). Diachronic change is also implicit in the concept: from a condition of less to greater similarity.

Today, most Andean scholars find the horizon concept useful not primarily for chronology-building but to discern cultural boundaries – for example, what is or not Chavín, or the extent of imperial Inca style. Also, it remains a conservative term to describe wide pan-Andean cultural phenomena, without unduly ascribing functional or stage-based labels (e.g. 'state,' 'Formative,' 'Classic'). While this fulfills Rowe's original desire to avoid evolutionary terminology, the notion of horizon as a block of time becomes less important. Burger (1993: 46) observed, 'once freed from its function as a chronological tool, the horizon phenomenon can itself become the object of investigation'.

Recently, Jennings (2011: 123, this volume) details an important consideration of temporality in his cross-cultural study of ancient globalizations: 'time–space compression'. This hallmark of the late capitalist system refers not to the speed of globalization as much as the temporal experience of greater connectivity and the 'feeling of a smaller world' by those involved. The process is facilitated by more efficient modes of communication and interchange, such as animal-drawn transport or the internet (see also Eriksen 2007).

Three Andean horizons

Having outlined the underpinnings for my analysis, this section describes the three horizons (Figure 3.3.2). For each, I will detail the general social context, followed by observations on the principal forms of interaction. The final comparison considers each period's social connectivity.

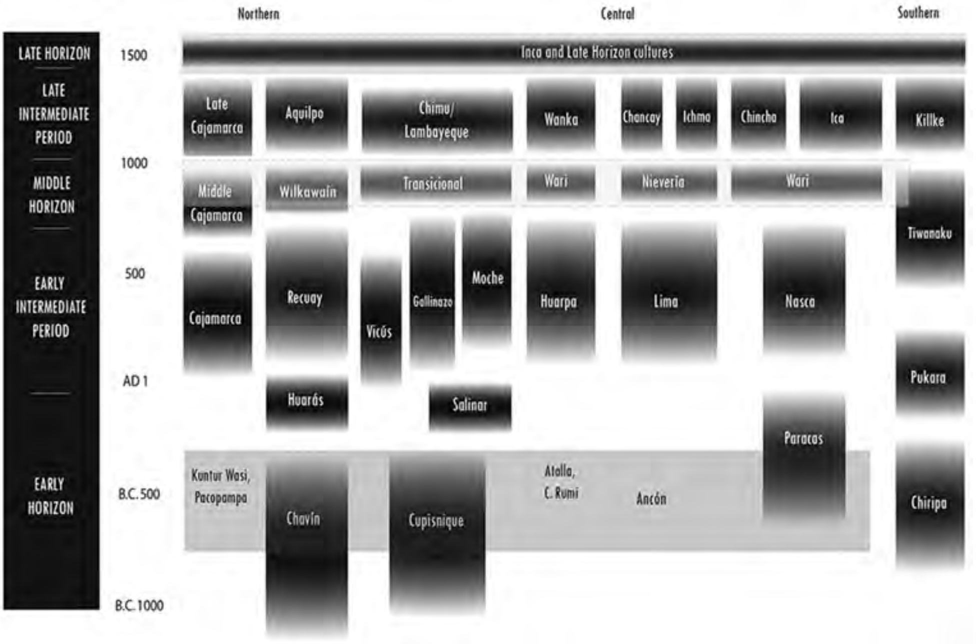

Figure 3.3.2 Chronological scheme for the Central Andes, showing the horizons

A Chavín community

Context

The Early Horizon is associated with the spread of the Chavín culture (Burger 1992, 2008). By the end of the second millennium BCE, Chavín de Huántar became paramount as a ceremonial centre, headed by theocratic leaders. Its elaborate temple complex arose in the service of cult practices based on pilgrimage, water ritual and idols of mythical beings (Conklin and Quilter 2008; Fux 2011). The temple complex consolidated different exogenous influences, especially the platform mound architecture and imagery of earlier societies. Large carved monoliths feature fanged creatures and hybrid human-animal figures. The imagery contributed to the religion's otherworldly and disarming ideology.

Chavín benefitted from three major economic innovations. The first was in organizational complexity (Burger 1992; Rick 2008; Rodriguez Kembel and Haas 2013). There was enormous labour expenditure for building the temple, and also its functioning and upkeep; periodic expansions as well as renovations were also precipitated by environmental processes (e.g. earthquakes, landslides, erosion). The labour, it is thought, came from the proto-urban community around the ceremonial complex and/or the nearby hinterlands.

The second important innovation was the intensified use of domesticated camelids. Camelids had been reared for at least a millennium, but it was with Chavín that local societies appeared to have committed fully to the new technology. The intensification developed regular sources of meat and hair fibre, and emphasized the role of camelids as pack animals (Miller and Burger 1995). The use of camelids to expedite transport probably facilitated 'time–space compression', a strategy that enhanced Chavín's connectivity and reach.

The other major innovation was an unprecedented capacity for interregional exchange. Chavín became a major, if not the principal, node in a long-distance exchange network (Burger 1992, 2008). Not only was Chavín successful in accumulating rare and exotic materials, but, once acquired, it seems to have been able to redistribute them, perhaps through specialized traders, travellers to the temple or proselytizing priests. Chavín's long-distance network was unprecedented for its time, extending over 1,300 km from north to south and traversing many dozens of ethnic groups/territories (Contreras 2011).

The transformations worked together to underwrite Chavín's florescence. Camelids allowed Chavín's settlement and temple complex to be more successful than other ritual communities of the time. Its surplus resources translated into a wider economic system, which, coupled with the pilgrimage centre's rising status and growth, enhanced the desirability and prestige of cultic items and practices.

Interregional exchange

Portable prestige items were crucial to Chavín's success. These included fancy polished, modelled and painted ceramics (Burger 1992; Druc 1998; Lumbreras 1993). Marine shell was worked into musical instruments, personal adornments, and offerings. Hammered metals were used for pendants, crowns and breastplates. Implements for preparing and using hallucinogenic snuff also seem to have been part of the cultural exchange, including finely made mortars and snuffing spoons. Carved bone was also probably exchanged (Burger 2013: 328).

Raw minerals and stone were also important goods. Obsidian, rock crystal, pyrite, blue- and greenstones, anthracite, and cinnabar were the most important. Obsidian was important for quotidian uses and a fundamental part of Chavín's greater exchange ties (Burger 2008: 696). Ground red cinnabar was favoured as a colourant on metalwork and pottery, for Chavín and its contemporaries (Cooke *et al.* 2013).

Connectivity

Chavín period connectivity was heavily linked to religious content. Many objects were vital in cult contexts, especially as offerings and ritual equipment. This is quite different, for example, from the Inca propensity for transporting bulk items. Chavín may have redistributed long-distance goods as tangible remembrances of the pilgrimage experience (Burger 2013: 325).

The network spread by affixing Chavín precepts to local systems. Other ceremonial centres may have served as 'branch oracles' (Burger (1992: 194), networked to the principal cult centre at Chavín de Huántar. Some of the better-documented include Pacopampa, Kuntur Wasi, Atalla, and Campaniyoq Rumi (Fux 2011; Kaulicke and Onuki 2010). These centres flourished during the Chavín horizon, and their success also coincided with intensified interregional interaction.

Chavín was not configured to impose its political will. It never seems to have developed much administrative or military infrastructure. While religious ideology for local political purposes was at their basis, regional cult branches also managed to spread distinctive Chavín practices, objects and imagery. The art also rarely contained martial imagery. Rather, it highlighted supernatural others in a cosmology premised on bodily transformation and their power and fertility. These very likely comprised the main 'regimes of value' for Chavín materials (Appadurai 1986; Myers 2001). The cult's message was also almost certainly embodied through practices led by Chavín priests. Especially important was the taking of hallucinogenic substances and the display of articles and textiles emblazoned with the cult's fantastic imagery.

Chavín has long been known for its monstrous creatures. David Wengrow (2014) has observed that the earliest Old World civilizations, those with urban-based inter-regional economies, are also characterized by images of 'composites' (with/from multiple species). For Wengrow, images of composite creatures were fundamental in the rise of standardization in the service of new Mesopotamian city-states – specifically in record-keeping, bureaucracy and architecture. In keeping track of how parts fit to the whole, large-scale socio-economic networks spurred on the world's 'first age of mechanical reproduction.' Chavín also made popular innovative forms of image transfer (especially stamped pottery designs) and modular configurations in various media. By piecing together beings from various predatory species, Chavín incorporated them into its own innovative horizon aesthetic.

Middle Horizon intercultural networks

Context

The Middle Horizon (*c.*700–1000 CE) describes the time period for the rapid cultural expansion of the Wari culture. By around 700 CE, the Ayacucho region of Central Peru saw tremendous building projects centred at the vast site of Huari, one of the largest cities in the Pre-Columbian Andes. Many scholars consider it the seat of power for the first pan-Andean state and precursor to the Inca empire (Isbell and McEwan 1991; Schreiber 1992; Tung 2012). Wari influence extended to Cajamarca and south to Moquegua; some areas saw more intensive intervention (e.g. Giersz *et al.* 2013; Jennings 2010; McEwan 2005; Nash and Williams 2009; Watanabe 2011). Wari also spurred on many regional developments outside of Ayacucho, although often with a fainter Ayacucho-led footprint (e.g. Jennings 2010; Jennings and Castillo 2014; Lau 2011).

Wari left behind signature forms of material culture (Bergh 2010; Cabrera Romero 2001). The Middle Horizon is, first and foremost, a distribution of Wari material style, especially pottery (Menzel 1968). Wari is also known for special forms of buildings, including patio-groups and D-shaped structures (Cook 2001; Isbell and McEwan 1991). Weaving and special kinds of metallurgy were also important (Bergh 2010; Lechtman 1996). Cord instruments, known as khipu, may be related to new forms of record-keeping associated with state administration (Urton 2014).

Interregional exchange

Exchange was one of the principal activities of Wari expansion. Some have argued that the Middle Horizon is perhaps best characterized as the cultural patterning resulting principally from trade interaction; Wari acted as one of a number of powerful regional polities and, given the wide distribution of its material style, may have ascended to paramount status (e.g. Jennings 2011; Shady 1988; Topic 1991).

The precise role of Wari in this process is still unclear (Isbell 2008: 744). At present, it is premature to characterize long-distance exchange at the Huari capital, in part because of looting and uneven preservation. The published literature gives the impression that trade items were not particularly abundant or diverse, excepting stone beads. Trade evidence includes obsidian, *Spondylus* sp., mother-of-pearl, chrysocolla and turquoise-like stone (e.g. González Carré *et al.* 1999; Jennings 2011: 107). Cinnabar and malachite are reported as having been used as funerary offerings. Many of the raw materials were used in lapidary work and personal adornments. With the exception of Cajamarca and its derivatives, internal assemblages of ceramics at Huari were comparatively insular, even for the high-status tombs (Benavides 1991: 64–66). Nearby settlements, including the large site of Conchopata, reveal comparable kinds of artefacts and variability (Isbell and Cook 2002; Pozzi-Escot 1991: 86). While Huari was clearly a major settlement, it has yet to clearly show patterns of exchange and accumulations of long-distance items one would expect of a major trading hub.

Paradoxically, better evidence for interregional interaction occurs away from the Wari heartland (Jennings 2011: 111–19), especially in areas where long-distance trade had been minor. Wari influence in northern Peru, for example, led to diverse access to and intensive consumption of exotic materials, even for small village communities (Lau 2010). The principal markers of Wari long-distance trade commonly consisted of: Wari-style polychrome ceramics, tapestry cloths and personal adornments (not least tunics and four-cornered hats), lapidary work and shell and stone figurines, and Cajamarca fineware. Less often, there are inclusions of other exotic styles (e.g. Nievería, polished blackwares, Robles Moqo, Atarco), but these were less standard.

Connectivity

In the previous Chavín Horizon, stone carving was pivotal in orienting shared imagery and ritual practices. As cult images, they also inspired new provincial forms of artistic production. In contrast, pottery and textiles appear to have been the main media in Wari networks.

Festive generosity seems to have been fundamental in provincial relations. Many Wari-style vessels – in the form of human figures or festooned with Wari polychrome motifs – were meant to contain, store, prepare and serve drink, most notably chicha beer (Cook and Glowacki 2003). Wari's spread may have also been associated with the institutionalization and spread of other kinds of chicha (Moseley *et al.* 2005; Sayre *et al.* 2012). Wari objects would have been especially potent because they illustrated figures and symbols, probably key elements in Wari traditions, as vital in distributing drink and nourishment in provincial settings.

In each region where Wari took root, the new materials were very different to what existed locally. New emphases were placed on brilliant polychrome materials, elaborate techniques, and rarity. The presence of exotic materials illustrates a clear local interest in their newness and technical creativity. In many regions, those new materials instigated forms of emulation, especially in pottery-making (e.g. Lau 2010; Menzel 1968; Owen 2007).

Wari also appears to have latched onto existing local features for relating to provincial groups. Common imagery, for example, suggests that some figures (e.g. double-headed creatures, feline–serpent hybrids, 'Ayacucho serpent'), perhaps mythical celestial beings, may have been shared *before* Wari expansion; these probably served as logical starting points for articulation between ethnically diverse regions (Lau 2011: 258). Ancient languages are poorly known, but it is probable that many languages were spoken during the time before the Middle Horizon, especially in northern Peru (Heggarty and Beresford-Jones 2012; Kaulicke *et al.* 2011). With absent evidence for linguistic homogeneity, it seems likely that valuables and attendant belief systems provided a common medium for cultural connectivity between Wari and provincial groups (e.g. Recuay, Lima, Late Nasca, Late Moche, Middle Cajamarca). This is supported circumstantially by evidence, albeit uneven, of all these cultures emulating forms of Wari material culture.

As for Chavín, individual elements appear to have centred on a bundle of ritual equipment. Some were elements of attire, such as distinctive tunics and hats, that almost certainly marked Wari individuals, perhaps notable dignitaries or 'agents' (Knobloch 2002). The new identity probably enabled important Wari practices to be viewed as part of making local subjects – activities that had to with generosity, combat, specialized exchange of prestige goods, diplomacy, and incorporation of local divinities.

Interestingly, some kinds of items were redolent of Wari origins/affiliation, such as effigy vessels and figurines. Ceramic equipment and attire also featured manufacturing techniques, designs and mythical figures and creatures highly distinctive to Wari (Menzel 1968). But other objects appear to have retained their exotic essence(s), such as foreign styles of pottery (especially Cajamarca), *Spondylus* sp. and other marine shells, and semiprecious stones.

As in Chavín, the individual items of long-distance exchange were commonly bundled together as ritual equipment and portable tokens of identity. They were clearly objects and materials people saw as special. But the Wari case seems different in inspiration, notwithstanding their distinct imagery and technical style. The set of materials did little to obfuscate their cultural and ethnic sources. They may have signified as 'collections' from multiple nations and source communities, not unlike stamp or coin collecting or, fittingly for colonial contexts, Western ethnographic museums. Many exogenous items within the bundle kept their culturally 'exotic' status (Cajamarca, Nievería, etc.), but were re-packaged as emblematic of Wari. It seems likely that aspiring leaders, both within the Wari sphere and in neighbouring areas, began to acquire, enclave and redistribute exotic material culture as their own, in the formation of a new imagined community promulgated by Wari's increasing power.

An empire of things

Context

The Late Horizon (*c.*1450–1532 CE) is, technically, pegged to the spread of Inca material culture. The Inca empire emerged in the south-central Andes, based in Cuzco, and expanded through territorial warfare, diplomacy, alliances, tribute and ideology (Bauer 2004; D'Altroy 2002). In less than a century, the Inca fashioned the largest polity in the Americas before the Europeans.

The Inca consolidated their realm by establishing infrastructure across the empire, including administrative centres, forts, checkpoints, storage depots, and shrines linked by extensive roads (used by administrators, armies and *chaski* messengers). The entire system functioned to channel and redistribute the work of people (Murra 1980). Labour tribute was converted into services and goods through collective projects (e.g. war, building, farming, weaving).

Interregional exchange

Compared to earlier horizons, the basic outline of Inca economic organization is fairly well known, especially in terms of 'statecraft' (D'Altroy and Earle 1985; Morris 1986; Murra 1980). Products and labour flowed through its extensive state installations. The Inca seemed to have muted prominent forms of exchange associated with markets (e.g. Goldstein 2013; Murra 1980).

Unlike the earlier horizons, which focused on portable, high-status valuables, the Inca horizon saw a broadening of the kinds and quantities of circulated materials. In addition to prestige goods, the Inca often redistributed bulk materials, including food staples (D'Altroy & Earle 1985). Even large stone blocks (for monumental buildings), weighing many tons each, were moved great distances (Ogburn 2004). The state also resettled communities of people, often to quell resistant populaces and to relocate skilled workers and retainers for nobles; this also had an effect on the circulation of long-distance articles (Burger and Salazar 2004; Murra 1980).

Connectivity

The Inca state, especially portrayed by the early colonial writers, was one of orderly, systemic efficiency. Provinces were administered through direct and indirect forms of rule (D'Altroy 2002) and archaeology, generally, reveals great variability in the extent of Inca intervention.

Administrative architecture is not always present, but state ceramics almost always occur in areas under Inca control. Hyslop (1993: 346–47) observes that while the state could function without elaborate provincial centres, it could not do without the labour generated by state-sponsored festive generosity for which beer storage and serving vessels were essential (see also Bray 2003). The state kept records through khipu cord devices.

The connectivity seen earlier with Chavín and Wari, which highlighted rare bundles of prestige goods, apparently gave way to more regular relations with Inca culture. Not only was there regular labour tax in annexed territories, but provincial state installations and roads, built with local labour, also must have been active and visually impressive expressions of socio-political relations. The key shared activities that promoted intersubjectivity (e.g. display, collective work and ritual) during Chavín and Wari periods appear to have been more occasional and less extensive in scale than in Inca.

Interregional connections also manifested in the Inca practice of *capacocha* (or *capac hucha*) sacrifices. These were usually of children, who were sent by high-ranking families in the provinces. After their consecration in Cuzco, the Inca capital, they returned to their homelands and were killed at sacred, usually ancestral locales (e.g. islands, mountaintops, ruins). As binding acts of alliance between the Inca and provincial polities, the sacrifices were essentially exchanges of objects, including, of course, the human victim. A set range of offerings accompanied the sacrifices: especially human and camelid figurines (metal and shell, and wrapped in miniature textiles), *Spondylus* sp., polychrome vessels, textiles, and bags with coca. In addition to being fundamental for recognizing the distribution of Inca material culture, the offering objects were essential in the establishment of formal links between Cuzco and province (Hyslop 1993: 346).

Discussion

The foregoing has summarized archaeological patterns to compare the large-scale connectivities of the three Andean horizons. The Inca recognized their world as 'Tawantinsuyu' (Quechua for 'the four parts together,' in D'Altroy 2002: 1), which connotes the interconnections between all the parts. I suspect the peoples participant in the Chavín and Wari Horizons also perceived this greater scale of connection which constituted their worlds and sense of identity (Burger 1993: 68). Perhaps 'worlding' may be suitable to describe these cases; where there is common ground between the etically constituted 'global' and the emically constituted 'world' is in the notion of imagined community, which in a sense, does not privilege fixed scales or perspectives.

Jennings (2011) has identified 'past globalizations' in pre-modern periods. In his model, two factors are essential: surge in long-distance connections and creation of a global culture. These are intimately linked with the growth of early cities. If these constitute the principal criteria, globalizing processes very well characterize each of the three Andean horizons. Each saw a rapid intensification of long-distance interactions. Also, each horizon featured the rise of global cultures and specialized contexts for prestige items and valuables.

More importantly, the comparison reveals significant patterning and variability between the three Andean horizons. If each horizon represents a surge in interregional interaction, it is notable that earlier groups (prior to each horizon) were either uninterested in or had little access to long-distance valuables. They were also typified by fairly insular economies. While some exchange certainly existed prior to each horizon, they were reduced in terms of geographic space and intercultural connections. Also, all three horizons benefitted from new innovations that enhanced the rapid connectivity and 'time–space compression' of large-scale expansions. These included camelid transport and new forms of infrastructure, that transactioned valuable content (goods, services and knowledge) on a scale and effectiveness far greater than were evident in each preceding period.

The three horizons emphasized cultural practices that transcended major frontiers. They expanded from highland cities to different regions of diverse environmental and ethnic make-up. Nonetheless, the record of provincial encounters was quite distinct. Chavín materials were wide-ranging but were usually limited to the provincial cult branches and their immediate vicinities. In contrast, there was greater uptake of Wari and Inca objects by commoners and rural groups. In the Inca case, language standardization and khipu helped different groups to communicate. As Willey (1962) observed (quoted above), objects furnished a complementary mode of articulation, which knitted together the 'smaller parts' of the growing 'social universe'.

Asymmetrical relations in political power, prestige or social capital certainly oriented the connectivity. This is most apparent during Inca times, with its infrastructure to extract resources from its provinces. Even without the physical apparatus, however, the very important status of Chavín and Huari as cultural centres cannot be underestimated, particularly as places influencing the arts and ceremonial practices of others.

The provincial settlements of each horizon indicate variable kinds and levels of long-distance engagements. The Chavín horizon saw the emergence of branch oracles, linked to but also largely independent from Chavín de Huántar. Wari, meanwhile, aimed for consolidation through administrative centres, but many were never finished or occupied for their intended purpose. In general, the nodes in Wari and Chavín networks were fewer in number, and do not seem to have been linked with roads as extensive or effective as the Inca system.

The extensive circulation of goods also raises the issue about the composition and desirability of goods in and away from the centre. Besides the sheer scale of interaction, perhaps what transformed the most during the horizons regarded how culturally salient objects were engaged with and cognized. By this I mean how long-distance objects were mobilized to do stuff in addition to being bearers of meaning. In all the cases, many exchange items helped shape the power relations, at least initially, between locals and non-locals (e.g. Dietler 2010; Thomas 1991). They were not simply inert or practical things that exchanged hands.

What circulated were objects and materials that actively mediated local value systems, and, in the process, became increasingly embedded in the provincial societies. For instance, many artefacts that circulated due to Chavín and Wari efforts were either ritual equipment or items of personal attire and accoutrements. The artefacts identified their bearers and users as affiliated with the expansive culture, and thereby channelled qualities of prestige into provincial contexts.

In addition, the exotic materials very often formed key elements of special object bundles. This is essentially a set collection of individual items of diverse origins configured together for a joint purpose. In Chavín, they were special equipment associated with ritual occasions: music, the consumption of food and hallucinogenic snuff (e.g. spatulae, tablets, mortars/pestles), and personal display. In Wari, the bundles seem very much related to display practices of increasingly powerful elites. These were provincial peoples who were actively showing new dispositions in consumption from various parts of their expanding, intercultural world; it was affiliation by acquisition. Inca state-sponsored capacocha rites also brought together a prescribed set of highly symbolic forms from various parts of the empire, including the sacrificial victim, to instantiate this union.

In all three horizons, material things took on new statuses, by way of their configuration and use. Chavín-period valuables frequently saw their pathways as exchange items alter with their deposition in ritual caches or through deliberate breakage. As key elements in periodic rituals, the close of the ceremony or ritual cycle may have required their termination. Wari objects, meanwhile, saw their final use most commonly in burials of local elites. This might denote their key role as personal items of identity and status, where disposal was probably more intimately associated with the deceased. This was also the case of the capacochas, for the victims' transition from incipient persons (noble children) to objects (sacrifices) to perpetual persons (ancestral figures binding sacred locality to Cuzco) again. In all cases, special things are first transacted for and then converted into visually discursive instruments. The work of these objects helped to articulate and position disparate peoples.

Finally, all three expansive cultures emphasized finely made things to serve in the ritual economies of their burgeoning social networks. Perhaps most important, the items were instruments for creating new subjectivities among provincial groups having to do with transforming local bodies and the embodiment of new identities. The artefacts served in embodied practices, exemplified by consumption (of food, drink, psychotropic substances) as well as public displays of new social statuses and affiliation (through attire, designs, wrappings). The new practices were also inscribed, through pots, sculptures, monuments and imagery – all impressively accomplished through advances in technology and organizational effort. These practices appear to have sought to change the codes and systems of sensing in the provinces, but especially ways of seeing, that the material culture invited or demanded (modularization, abstraction, perspective, brilliance, etc.).

All this had drastic effects on local value systems and aesthetics – what was inculcated as ideology through the circulation of objects. The valuables built networks of people, who at least for a moment came to share similar tastes, statuses, and interests. These helped to define terms for acquisition and consumption that were comprehensible across the many kinds of divides in the Central Andes (rank, ethnic, environmental, linguistic, etc.).

Conclusions

If 'globalization' is to be useful heuristically in archaeology, it will need to go beyond being mostly a descriptive category. Research will need to evaluate the degree of fit with archaeological evidence so that comparative insights can emerge about ancient macro-scale socio-economic networks and connectivity. Scholars will also need to be content that globalizing processes can characterize past social worlds smaller than the 'global' scale (Jennings 2011; Knappett this volume).

In examining globalizing 'processes' associated with the Andean horizons, this chapter emphasized the role of culturally salient things in cultural expansion. In each of the horizons, valuables played a central role and they were interrogated here precisely because much of this material culture is essential to the concept of a rapid, expanding cultural style implicit in 'horizon'. I highlighted the innovative and shared cultural dispositions, or 'connectivities', promoted by large-scale expansions.

The widespread circulation of goods and valuables cannot be divorced from strategies of domination. But standing back a little from the grand functional attributions, it seems that what was occasionally shared by various peoples during the three horizons were just a few, highly specific cultural forms and features – things I have called 'valuables' or 'artworks'. By obligation, many perishable items must have been crucial in the exchange networks but, due to sampling and preservation, must await future consideration.

The rarity of valuables should not take away from their potency. In fact, their power resided in their limited nature. Their value was also subject to their incorporation in bundled configurations. Very often, these treated the conspicuous visual qualities and their sensate effects, which probably helped them to transcend ethnic and linguistic frontiers. In short, the three horizons introduced new ways for how images could be seen, experienced and, crucially, made locally useful.

In the horizons discussed, there were greater movements of peoples and things than before, and this effected more connected worlds. It seems that there was also greater propensity for persons and objects to occupy statuses as objects of exchange. Very commonly the interaction was to help make embodied subjects. By this I mean they were special valuables that did ritual work in, on and around the bodies of provincial people, and in doing so, facilitated their integration into a larger imagined community. The idiom of extended social relations was basic, for it centred on corporeal capacities and its nourishment: feeding, transformations, and enhancements (e.g. Ramírez 2005). This obtained for live as well as dead bodies, and extended to engagements that were largely forced or promoted by local agency. In short, the roles of valuables featured greatly for peoples and cultures that sought to position themselves in increasingly larger worlds.

In addition to the four tools crucial for characterizing large-scale interregional connectivity, I have been especially interested in characterizing two additional components: the temporal dimensions and the limits of connectivity in the ancient Andes. For the former, at least, Andean 'horizons' have provided ready analytical categories that can be interrogated for their properties of connectivity, especially in terms of diachronic process and period-based transformations in material culture. In addition, we have also readily seen how local, existing cultural dispositions ('limits') affected forms of action in larger, globalizing contexts. These oriented tolerances and intermittent opportunities for the acquisition and use of valuables. Limits are not merely 'resistance' or 'local agency,' although on occasion this may be applicable; rather, I see limits as those cultural frameworks that effect if and how connectivity can thrive, endure or fail. They emerge through changing knowledges and value systems that ground how local groups 'world' any period of complex connectivity. In other words, limits affect how potential goods, ideas and beings associable with globalization are internalized.

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3.4

Foreigners from far-off islands: long-distance exchange between western Mesoamerica and coastal South America (600–1200 CE)

A globalization analysis

Alexander Geurds

Introduction

For the Americas, it is generally agreed that metallurgy developed very early on in South America, as early as the middle part of the second millennium BCE in the Peruvian highlands (Aldenderfer *et al.* 2008; Lechtman 2014). In addition to gold, copper and copper alloys were among the primary foci for metalsmiths in parts of Ecuador, Peru, Bolivia, and northwestern Argentina. Later on, around 500 BCE another core area of metalworking emerged in Colombia, eventually including Central America around 200 BCE (Bray 1984), and influencing eastern Mesoamerica, mainly the Maya area, subsequently (Bray 1996). With techniques initially consisting of the lost-wax method as well as cold hammering, over the course of the following centuries these technologies developed rapidly in South America, enabling ever more specialization in both procurement of raw materials and fashioning of objects. Eventually, it is generally agreed, this body of knowledge or perhaps more precisely, persons who embodied this knowledge, found their way to other parts of the American continent. Most likely overland to Central America and the Maya region, and to western Mesoamerica, probably by means of a maritime trading route (Figure 3.4.1).

This chapter reflects on the long-distance connectivity between these western parts of Mesoamerica and the central Andes and the ways in which metallurgy and metal objects were adopted in western Mesoamerica. Particular focus will lie on the transfer between these distant regions of specialized technologies involved in working metals, predominantly copper and copper-based alloys, and what we can say in terms of how this connectivity was integrated in local societies.

Space does not permit here to include data from other disciplines investigating long-distance contact between western Mesoamerica and the central Andes, but recent research is providing noteworthy and promising results – principally in relation to historical linguistics through the distribution of words such as ‘seashell’ (Matthias Urban, personal communication) and genetic

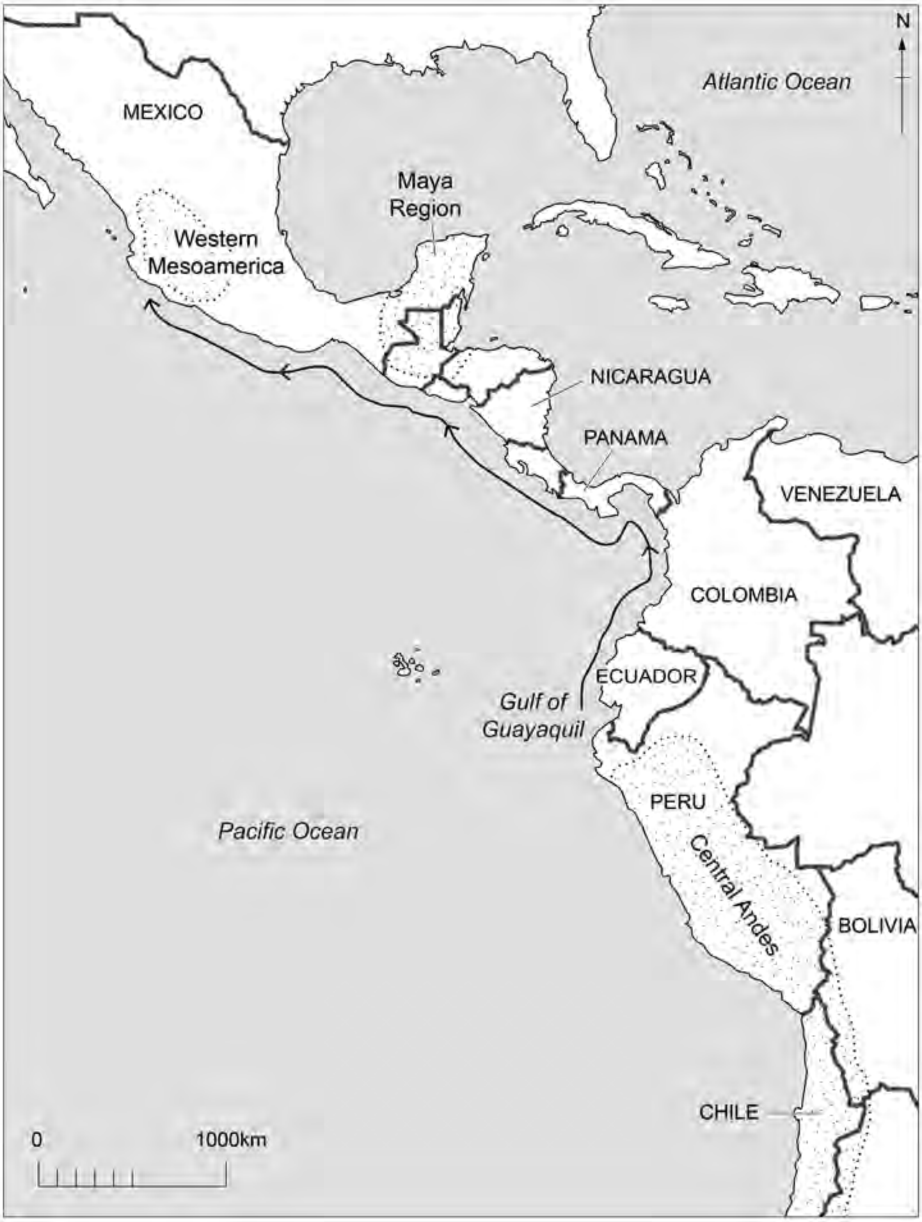

Figure 3.4.1 Middle and South America indicating locations mentioned in the text

studies looking at gene flow between parts of Mesoamerica and Pacific South America (Brucato *et al.* 2015). References from archaeological studies to linguistics are fleeting at best for now. Nearly all studies, early and more recent, rely in their entirety on material culture comparison and sourcing for indicators of long-distance mobility and exchange.

One of the reasons why including this case can be relevant is the observation that among the large majority of early societies, direct long-distance interaction was often not in their capacity nor interest (Robertson this volume), even though cases are indeed documented from very early on in human societies (Feinman this volume). So the question is how the observed transfer of technology may have contributed to the acknowledgement of cultural differences, with sea-navigating merchants arriving intermittently at the coastlines of western Mesoamerica and introducing the practice of metallurgy as well as, initially certainly, the copper objects that were new in terms of their materiality and shape. If globalization theory is sensitive to the interplay between the transfer of practices and the confrontation with cultural difference (Hodos this volume), then the case examined here holds relevance.

Another point to consider is the particular nature of the materials exchanged into western Mesoamerica. I will contend that the characteristics of metal objects are crucial in terms of improving understanding of this case of long-distance exchange. This argument is also brought in by Carl Knappett concerning the *content* of network ties (Knappett this volume) and forces us to question why this exchange was established in the first place. Especially in cases where exotic materials and unfamiliar technologies are introduced, this question of *why* is indeed in need of examination, alongside the ever-interesting uncertainties surrounding the *how*.

A further element that different renderings of globalization theory share is that of a decrease in perceptions of geographical distance and the subsequent sharing of practices leading to the increase of connectivity (Jennings this volume). One might question how the long-distance exchanges between western Mesoamerica and the central Andes can illustrate this. One of the ways in which this can be evaluated is to assess what communities in western Mesoamerica did with the newly acquired technologies; what kinds of choices were made and how selective was this process? This case differs from other chapters in the Americas section that focus more on hegemonic forces imposing material culture during territorially expansive strategies (Sillar this volume). In such cases, the reinforcement of cultural contrast by emphasizing local identities is likely to have been a more prominent element.

The long-distance exchange focused on here is by no means comparable in scale, diversity and effect to the sixteenth-century joining of American crops, microbes, objects and people in European and East Asian networks, made famous under the heading of the 'Columbian Exchange' (Crosby 1972; Wallerstein 1974). Indeed, that eventful time period features heavily in globalization debates, which argue for a post-medieval start date on 'true' globalization (Robertson this volume). But the south–north interaction between Middle and South America, under scrutiny here, did usher in a series of technological innovations from 600 CE onwards, including the hitherto unknown properties of metal. It initiated a process of cultural incorporation suitable to consider in light of our focus on the potential of globalization theory in this kind of archaeological long-distance connectivity.

Globalization thinking places particular focus on local responses to incoming material culture. Metal-based objects constitute a very particular object category in this regard. The adoption of metallurgy comes with two aspects of materiality. The first is the nature and geomorphological presence of ores, necessitating particular forms of human adaptations in order to mine, extract and modify it. The second centres on the material properties of metal, bringing with it previously unknown aspects such as hardness, mass, shape, colour and sound, as such opening up new possibilities of use, interpretation and value-ascription. What can we recognize in western Mesoamerica regarding the local responses to this new material?

Some authors in this Americas section have provided examples of the active *rejection* of material culture as part of a selective process of adopting innovative incoming features (see examples provided by Sillar this volume). Others observe the agglutinative process of incorporating cultural elements from neighbouring societies, as for example through political subjugation (Berdan this volume). One might, however, also consider the possibility that the materiality of metal pushed cultural incorporation to a certain extreme; this topic of 'limits' is also raised by George Lau in his discussion of how Andean archaeological horizons shifted in space and through time (Lau this volume). How did the existing cultural frameworks in western Mesoamerica affect this seaborne connectivity with foreigners from far-off islands?

Long-distance mobility and exchange between parts of Middle and South America has a history in archaeology as long as the regional discipline, taking centre stage during its earlier classificatory period and continuing to be an influential explanatory theme in more recent multi-scalar studies, involving sites and regional dynamics. At the same time, it remains difficult to archaeologically attest maritime long-distance exchange by means of testable propositions. Interdisciplinary lines of evidence on this topic typically run parallel, with archaeology relying on partial and outdated linguistic data, and linguistic studies of phylogenetic or contact relations largely committing the same errors (Heggarty 2008). This chapter begins by outlining the principal early diffusionist arguments for inferring prehispanic mobility and exchange between western Mesoamerica and the central Andes, followed by an analysis of the data on metallurgy in western Mesoamerica specifically.

Early lines of evidence

Arguing long-distance exchange between Middle and South America (especially Ecuador and Mexico) developed from earlier diffusionist emphases in Americanist archaeology.When reviewing such pioneering scholarly analyses, terminating roughly with the publication of the *Handbook of Middle American Indians*, Volume 4 in 1966 (Wauchope 1966), diffusionist networks as an explanation for the spread of ceramic types basically consist of interregional arrows on a map in which a handful of investigated sites are mentioned (Evans and Meggers 1966; Ford 1969; Kidder 1940; Meggers and Evans 1963). This seems to be the case in Ecuadorian archaeology, more so than in the archaeology of western Mesoamerica. Cultural similarities were presumed to be indicative of direct (maritime) contact (Coe 1960, Lathrap 1966; West 1961).

The discussions proposing prehispanic contact in some shape or form, between parts of Middle and South America are long and varied. Regionally, they are likewise wide-ranging, involving several cases from along the Pacific coast of this massive area. Space does not allow for a full rendering of all of these cases, nor are several of them still considered in contemporary archaeological analyses.

In an early culture historical analysis, Stephan Borhegyi (1959a, b) lists more than sixty cases of material culture similarities between Middle and South America, which he refers to as 'parallel traits'. These revolve around eight categories of traits, in particular: (1) forms of ceremonial architecture and mound groups, (2) pottery forms such as stirrup-spout vessels, three-pronged incense burners and other particular types of vessels, (3) use of clay moulds, rocker stamping and other technological features, (4) mould-made hollow figurines, (5) ceramic masks, flat stamps and other miscellaneous ceramic objects, (6) stonework, (7) metallurgy, and (8) numerous other smaller examples (Borhegyi 1959a). Departing from a portrayal of bounded cultural units in both western Mesoamerica and the central Andes, Borhegyi does not offer any explanatory reasoning as to how or why the underlying assumption of mobility and exchange may have occurred. Nor is there any substantial argument as to the grouping of these difficult to compare examples of material culture.

Such uncontextualized analyses of particular material culture traits have receded to the background in archaeological publications. This is largely due to the gradual increase in number of investigated sites, combined with a shift from interregional to local perspectives, and the growth in number of instruments to determine chemical composition and subsequently source lithic and ceramic objects. Since the publication of the Borhegyi list, decades of archaeological research in both the littoral regions of Ecuador and western Mesoamerica have studied site-level

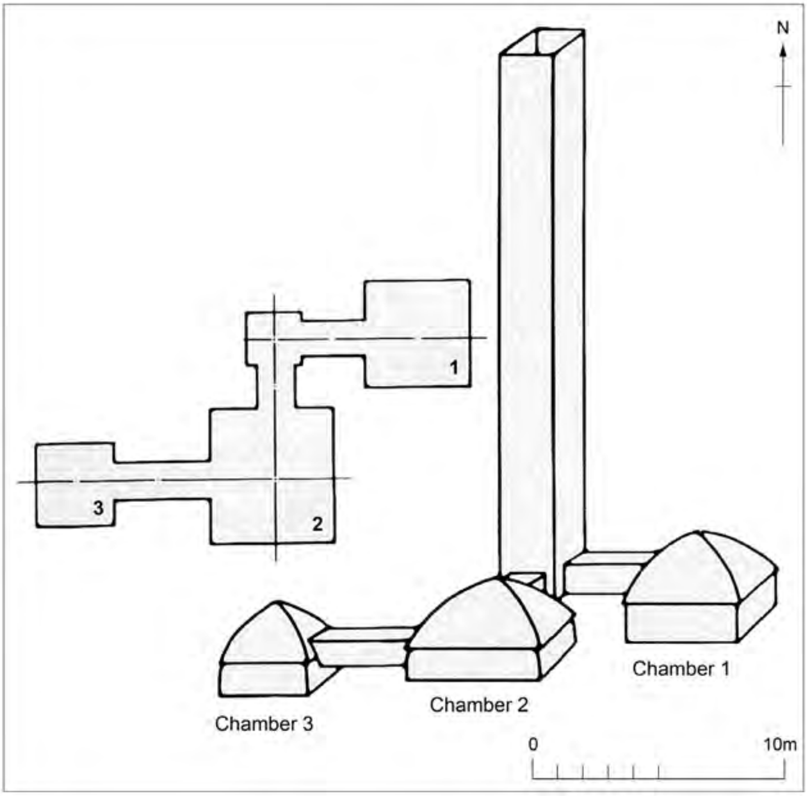

Figure 3.4.2 Example of a shaft tomb near Eztatlán, based on Corona Nuñez 1955

or regional contexts in order to gain insights into the particular developmental trajectories and the specific role of the material culture invoked in the long-distance interaction debate. Perhaps unsurprisingly, many of the listed traits are now questioned for their validity, instead highlighting continuous cultural development and seeing many of the examples of material culture style, originally considered anomalous, as outgrowths of the particular context under consideration.

Apart from pottery vessel shapes and decorations, another invoked similarity is that of the chambered shaft tombs, used in western Mesoamerica between 200 BCE and 500 CE, although some may date back as far as 1500 BCE (Beekman and Galván Villegas 2006; Fowler *et al.* 2006). They are otherwise unknown in Mesoamerica and fairly abundant on the southern coast and highlands of Colombia and Ecuador, and also documented on the north coast of Peru, in western Venezuela and Panama. The known examples from the Andean region date from 200 CE up to the sixteenth century. The western Mesoamerican tombs thus predate the South American examples (Figure 3.4.2).

The particular architectural similarities are primarily the configuration of these tombs, consisting of one or more side chambers connected by means of a central shaft leading to the surface. These tubes may be a little as 20 cm long or extend up to 20 m deep. The function of this shaft, readily providing access to the tomb interiors, may also serve to compare funerary practices such as depositing grave goods or removal of the deceased's body, for example, extending the discussion to not just material similarities but also likeness in cultural practices (Shimada 1999).

Lastly, interdisciplinary data points provide additional indicators of contact with faunal studies arguing that a particular bird species as well as a dog are found isolated in both western Mesoamerica and coastal Ecuador. Biologists have suggested that a species of painted jay (*Cyanocorax dickeyi*), occurring in areas of Sinaloa, Nayarit and Durango, is taxonomically the closest relative to the white-tailed jay (*Cyanocorax mysticalis*), known only in coastal regions of Ecuador and North Peru, and indeed that one of the two was brought to the other region by way of seafaring (Anawalt 1992, citing Haemig 1979). Woollen textiles may have been a gift or trade item, and this seems to be indicated by the presence of typical 'south American' weaving patterns documented in western Mesoamerica, as depicted in sixteenth-century pictographic documents (Anawalt 1992, 1998).

Western Mesoamerica

Western Mesoamerica has been viewed as a bounded archaeological region including the coastal regions of the current-day Mexican states Nayarit and Jalisco, the state of Colima and the coasts of Michoacán, stretching to include parts of Guerrero. Typically referred to as either 'west Mexico' or 'western Mesoamerica', it should be added that the just-mentioned regional composition is anything but an indication of cultural uniformity (Figure 3.4.3). Within this large area, political, linguistic and cultural differences were a constant throughout the prehispanic era (Beekman 2010; Pollard 1997: 348).

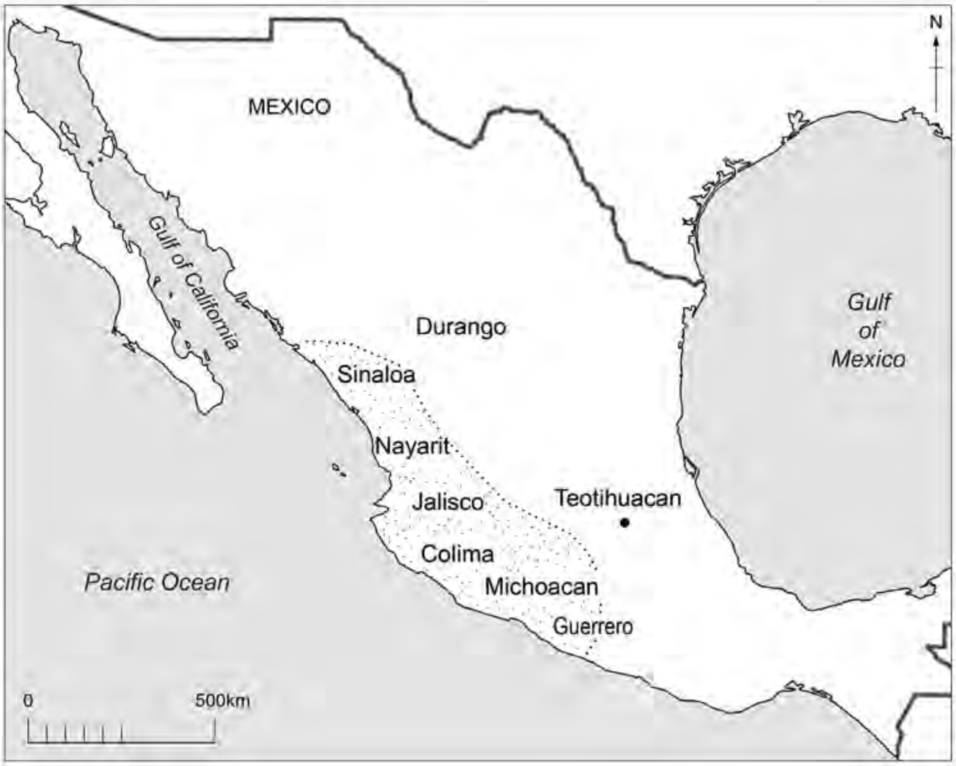

Figure 3.4.3 Western Mesoamerica

The discussion surrounding the regional container terminology is mostly concerned with positioning as to how this region relates to Mesoamerica as such, and is of lesser concern for this chapter.

Attention was drawn early on to this region in terms of some of the contrasts in material culture compared to neighbouring parts of Mesoamerica. It distinguishes itself through the above-mentioned tradition of shaft tombs, particular forms of ceremonial architecture, deviating apparel as documented in ethno-historical sources and particular ceramic vessel forms and accompanying design motifs. But the appearance in this region of metalworking stands out most conspicuously. It is the fairly sudden appearance of the complex chain of operational activities involved in metallurgy, including procuring ore, processing and crafting metallic objects, that has generated considerable debate as to the provenance of these techniques. It is generally agreed upon that maritime contacts were the most likely route of introduction of metallurgy in western Mesoamerica (Meighan 1969; Marcos 1977; Hosler 1988b, 1994, 2009), rather than land-based transferal. Sea current simulations (Callaghan 2003) and seaworthy vessel studies (Dewan and Hosler 2008) confirm the possibility of this having taken place on perhaps an annual basis.

What we know about the prehistory of western Mesoamerica is spotty, with temporal frameworks still needing to be firmed up, and cultural signatures within the region actually appearing to favour a more separate archaeological treatment rather than a wholesale evaluation. Several different physiographical areas in the region probably added to this pattern of divergent cultural development; it is by no means a single geographical unit (Beekman 2010). For the Formative period (1800 BCE–300 CE), the most fertile regions likely featured a social landscape consisting of hamlets and incipient forms of villages. The absence of monumental architecture and sparse examples of construction in stone make a better understanding of this period exceedingly complicated, reinforced by a limited amount of research into this era. By and large, most of the research conducted in this period has focused on chronology-building through pottery and the analysis of burial settings. For the Early Classic period, western Mesoamerica does not seem to follow the marked increase in population density, achieved through extensive urbanization, observed for other parts of Mesoamerica. Whereas the Early Classic period (300–600 CE) in Mesoamerica is the time in which sociopolitical complexity increases, and with it social and economic networks expand across the entire culture area, western Mesoamerica instead developed such complexity at a later stage. A clear understanding of, in particular, the coastal areas of western Mesoamerica is hampered because differences between Late Formative (300 BCE–300 CE) and Classic period (300–600 CE) pottery typologies remain to be identified, leaving the ceramic sequence handicapped by a segment of nearly a millennium in length (Beekman 2010: 68).

During this period, the early examples of shifts in sociopolitical complexity emerge. A role in this development may be played by the primary centre of Teotihuacan in the basin of Mexico to the east, establishing ties in parts of western Mesoamerica, although recent research has tended to substantially tone down this central Mexico influence, enabled by improved resolution in dating (Nelson 1997). A remarkable feature in this period is the public architectural form of the so-called *guachimontones*. These constitute clusters of spatially highly planned structures centred around a stepped circular structure. A predetermined number of rectangular platform structures are positioned around this circular pyramid, forming a ring-like perimeter (Weigand 1996). As such, the *guachimontones* diverge significantly from the bandwidth of Mesoamerican architectural variability (Kowalski 1997), though in their social meaning they may have fitted Mesoamerican ritual practices (Beekman 2003).

Unsurprisingly then, from early on, scholars have looked to explain and understand these marked regional distinctions by looking beyond local or regional archaeological developments

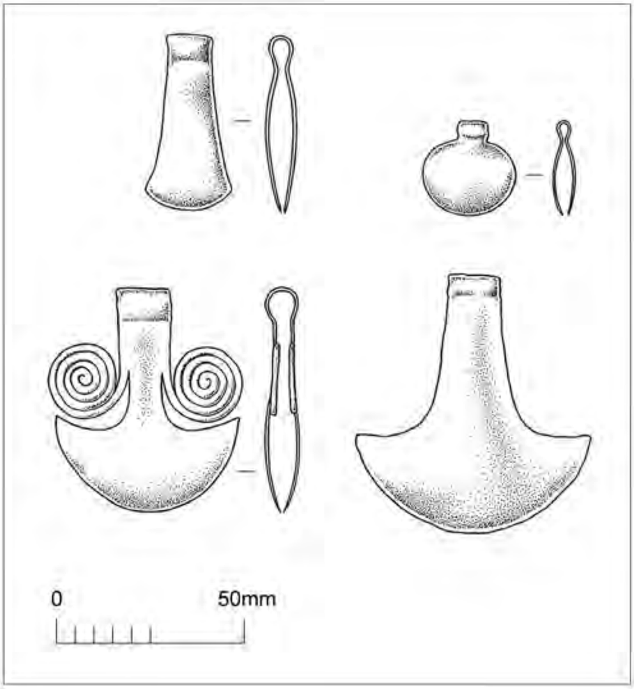

Figure 3.4.4 Period 2 ceremonial tweezers from Michoacán (based on Hosler 1994)

in favour of some form of long-distance cultural interaction between western Mesoamerica and other parts of the Americas, typically coastal Ecuador, around the Gulf of Guayaquil.

What is known today about metallurgy in western Mesoamerica is the product of the pioneering work by Dorothy Hosler (1988a,b, 1994, 2009), and her studies have provided an impetus to re-evaluate the long-distance maritime contact thesis. The initial stage of metal-working in Western Mexico dates to the beginning of the Late Classic/Epiclassic period (600 to 900 CE), during which time the first metal objects are documented at archaeological sites in the region, principally consisting of tweezers, needles and, first and foremost, small bells (Figure 3.4.4; Hosler 1994). These are predominantly copper objects, with some found near the Rio Tomatlan (Jalisco) and some directly imported from coastal Ecuador (Michelet 1995: 169). Archaeological sites where metal objects are documented this early are exclusively near the coastline, or along river courses close to the sea.

It can be argued that processes of geopolitical reordering and an overall process of political fragmentation hold relevance to the adoption of metal objects in parts of western Mesoamerica. Numerous polities vying to establish regional authority in inland parts of western Mesoamerica mark this period. Complicating this perspective on the Late Classic is the small amount of data specifically targeting coastal areas, but the successful adoption of metallurgy could be related to this dynamic of political reordering in order to satisfy the need for icons of authority.

The second stage, as defined by Hosler, recognizably starts around 1200 CE and is a period in which parts of western Mesoamerica are marked by processes of early state formation and increased regional centralization and possibly control of resources by the emerging Tarascan Empire (Pollard 2008), located in Michoacán and parts of Jalisco and Guanajuato. From 1200 CE onwards, the tradition of working of copper is enriched by the crafting of numerous alloys of copper, including copper-arsenic and copper-tin, creating different types of bronze. Such bronze alloys are more resistant and have a more lustrous appearance. Many of the examples of these alloys are documented at sites in the area under direct control of the Tarascan Empire, and state involvement in the process of mining and working the copper ore the extraction and smelting of copper has been suggested (Pollard 1987; Hosler 1994). The discrete operational steps involved in the metallurgical process of producing copper-based objects involve a considerable amount of individual specialization, and became associated to particular ritual cults (Roskamp and Rétiz 2013). Therefore, multiple individuals would have been involved in the process from ore procurement to final product. This segmented specialization would have been fairly easy to control for state agents, an observation made for the southern area of the Tarascan territory (Maldonado Alvarez 2008).

Coastal Ecuador

Between 1940 and 1947, Jacinto Jijón y Caamaño set the stage for Ecuadorian archaeology, publishing the monumental *El Ecuador Interandino y Occidental antes de la conquista castellana*, appearing in four volumes (Jijón y Caamaño 1940–1947). Citing sixteenth- and seventeenth-century historical sources, that include specific observations for the coastal Manabi province (Xérez [1528] 1937; Cabello Balboa [1576] 1951), Jijón y Caamaño observed the references to a densely populated coastal area, featuring large, spatially ordered settlements. In particular a few Spanish encounters with indigenous seagoing vessels (such as contained in Xérez [1528] 1937), weigh in on the arguments of seagoing merchants along the coastlines of Ecuador and northern Peru.

The discovery of early ceramics and sedentary societies on the southern coast of Ecuador, specifically around the town of Valdivia, further triggered early debates on long-distance maritime influences (Estrada 1956), though remaining unsubstantiated. Earlier scholars have postulated trans-Pacific contacts through comparison to the Jomon culture in Japan (Meggers *et al.* 1965, but see McEwan and Dickson 1978). Valdivia subsequently came to represent one of the earliest cultural developments in the Americas (Lathrap 1966), showing nucleated villages, ceremonial architecture and intensive agriculture. Accordingly, early Formative Valdivia sites were frequently included in comparative analyses of indigenous American societies. Even so, years of follow-up research in the region has indicated that in fact Valdivia fits quite well in local developments, leaving trans-Pacific explanations largely unsupported (Zeidler 2008). Such Formative period indicators for contact, Mesoamerican ceramic styles such as Capacha, El Opeño, and Tlatilco, are now far better contextualized in regional spheres of ceramics. Though still stylistically similar to the Ecuadorian types such as Valdivia and Chorrera, it is now considered highly unlikely that these west/central Mexican and Ecuadorian pottery styles developed in relation to each other. For the later periods however, and certainly when combined with Jijón Caamaño's argued 'League of Merchants', based out of the coastal Manteño region from 850 CE onwards, a firm background exists for arguing the importance of (maritime) long-distance trade among later prehispanic indigenous societies of Ecuador.

Metallurgy as a cultural tradition experienced a long developmental trajectory in Ecuador, with the earliest documentation of copper, silver and gold objects dating to the Chorerra phase (1500–500 BCE) on the central coastal regions. It then continues to be documented after 500 BCE and up to 800 BCE, when metal workers in Ecuador expanded both their technological skill set in crafting copper-arsenic and copper-silver alloy objects as well as adding new sorts of objects to their repertoire. Copper-tin alloys seem to be largely restricted to southern Peru and parts of Bolivia (Petersen 2010). Also fabricated from this period onwards were the so-called axe

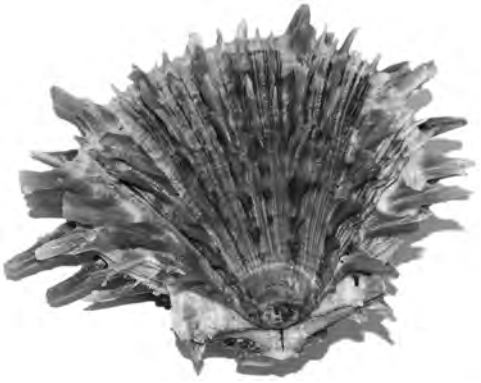

Figure 3.4.5 Spondylus princeps

monies, a type of standardized undecorated axe-shaped object made from hammered arsenical bronze (Hosler *et al.* 1990).

What drove the establishment of long-distance exchange from Ecuador to western Mesoamerica? Central to this appears to have been the thorny oyster, appearing principally in three species (*Spondylus princeps, Spondylus calcifer and Spondylus leucacanthus*), a warm water mollusc predominating on banks of limited depth off the coast of Ecuador up north to the Baja California peninsula (Figure 3.4.5; Keen 1971; Hocquenghem 2009). These shells were a prominent and much-discussed trade item along the Pacific Coast of South America. *Spondylus* shells held considerable cultural value in the prehispanic Andes, as their presence in high numbers in countless archaeological settings in the central Andes testifies (Shimada 1999; Paulsen 1974).

Similarly, they occur in painted decorations on ceramic vessels and as architectural elements on public buildings (Pillsbury 1996). Studies have shown these bivalves to be a central element in numerous ritual settings and associated to supernatural meaning (Blower 2000).

The exploitation of this marine resource goes back to the initial stages of cultural development in the central Andes, with commercial links extending in Ecuador from the coast north into the highlands during the second millennium BCE and eventually from 100 CE onwards into Colombia as well as south into Peru and even Chile (Paulsen 1974). Coastal trade routes were a likely choice for the merchants heading off to trade their *Spondylus* and *Strombus* shells (among other items) in far-away locations further south, although no evidence of these exchange routes exist for the earlier periods. For the last prehispanic period and the transition into early Colonial times, we dispose of an often-invoked quote from Francisco Pizarro's principal on-board navigator, Bartolomé Ruiz de Estrada, who observes in 1526:

> Traían muchas piezas de plata y oro para adorno de sus personas, para hacer rescate con aquellas con quien iban a contratar, en que intervenían coronas y diademas y cintos y puñetes y armaduras como de piernas, y petos, y tenazuelas y cascabeles [. . .] En algunas sartas de cuentas venían algunas piedras pequeñas de esmeraldas y calcedonias, y otras piedras y pedazos de cristal y ánima, todo esto traían para rescatar por unas conchas de pescado de que ellos hacen cuentas coloradas como corales y blancas, que traían casi el navío cargado de ellas.
>
> *(Xeréz [1528] 1937: 65–66).*

> [They were bringing objects of silver and gold as adornments for their bodies, to exchange with those they were going to negotiate with, which included crowns and tiaras and bands and tweezers and leg and chest armor and rattlers, and bells. [. . .] With some strings of beads came some small emerald and chalcedony stones, and other stones, and pieces of crystal and rubies, all of this they brought to exchange for some fish shells from which they make colored beads, coral and white, that they brought the vessel nearly filled with them.]
>
> *(Ibid.)*

The centrality of *Spondylus* in Andean ritual settings is a prime example of an exotic valuable (Figure 3.4.6). It is not found in the coastal water along most of the region where it filled this ritual role, due to the significantly cooler Humboldt Current that flows along the Peruvian coast and up the Gulf of Guayaquil. *Spondylus*, therefore, had to come from beyond the cultural horizon, and procured under delicate, if not to say dangerous, conditions of diving in the coastal waters of Ecuador and eventually even unimaginably further away still, requiring prolonged sea voyages to the north.

Interestingly, mirroring the distant exchange relationships to western Mesoamerica, the trade items coming back to Ecuador in exchange for the shells were predominantly made of copper. Peru and Chile harbour the largest copper deposits in the Americas, but the region of Pacific Ecuador does not feature naturally occurring copper ores.

Between 600 and 1000 CE (the Middle Horizon), *Spondylus* trade expands and intensifies in quantity southward along the Peruvian coast with the primary centre of Chan Chan starting to function as a coastal trading node in the exchange between Ecuador and central Peru toward

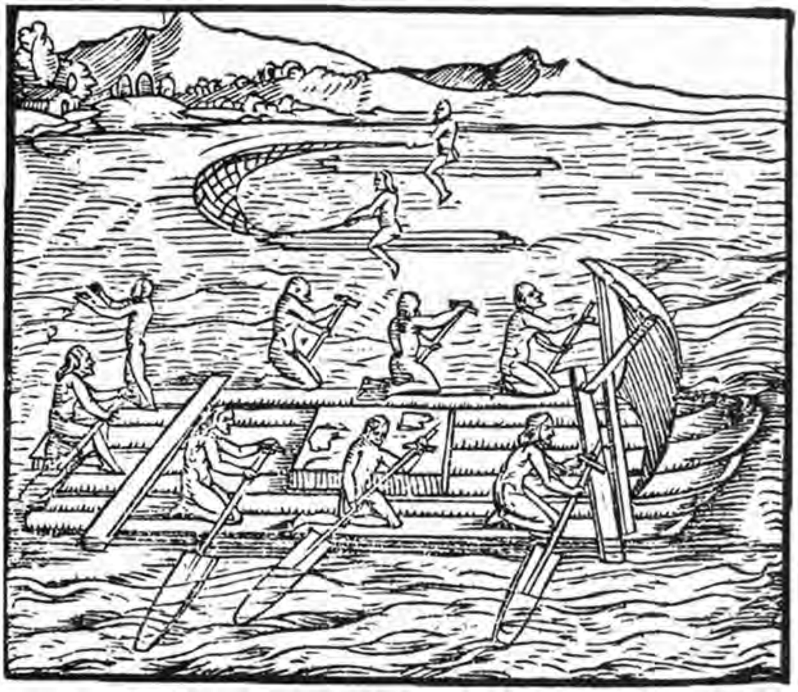

Figure 3.4.6 Sixteenth-century line drawing by Girolamo Benzoni (courtesy of The Granger Collection, New York)

the end of this period. Molluscs also come in high demand in the central highlands of Peru, as can be seen through the significant increase in the number of molluscs recovered in archaeologically controlled settings. Iconographic depictions of molluscs emerge along the coast on different media including pottery and hammered gold objects. In contrast, in the highlands, shells seem to have featured more prominently in ritual contexts. The difference between the *depiction* of shells in coastal settings and the *consumption* of shells in the highlands is to be stressed when discussing globalizing processes, as it attests to the indexical flexibility of exotic valuables. The use of *Spondylus* is documented for various purposes, including grinding them up to obtain red powder, or reworking parts of shells into grave gifts. The shell was valued in the northern and central Andes in relation to rituals surrounding agriculture and fertility. It was viewed as food for water-providing deities (Shimada 1999). In addition, evidence for workshops exist for this period, highlighting the growing industry of specialized shell workers, to fashion objects from shell (as in the case of *Strombus*) or to extract and grind the *Spondylus* in order to obtain the mentioned red powder used for ceremonial purposes (Pillsbury 1996; Shimada 1994; Cordy-Collins 1990). This macro-regional expansion of shell–copper trade networks coincides in time with the earliest traces of metal objects in western Mesoamerica and the growth of coastal sites in Ecuador.

The early and intensifying practice of harvesting and trading *Spondylus* shells facilitated the exploration of new maritime horizons northward, from the Guayaquil peninsula along Colombia and, beyond that to the Middle American coastline, eventually stopping at the Gulf of California. This expansion was facilitated by the presence of *S. princeps* and *S. calcifer* on shallow banks along the Tropical East Pacific or Panamic Malacologic Province (Skoglund and Mulliner 1996). Some data are available for the route between this Ecuadoran starting point and western Mesoamerica, with *Spondylus* use at different sites being reported for coastal Panama in particular (Carvajal and Hansell 2008; Cooke and Sanchez Herrera 2001), predominantly from 600 CE onwards. Whether or not these communities participated in the long-distance trade or developed their own local value for *Spondylus* is left unresolved. What is certain is that these molluscs figured prominently in trade networks along the Pacific coast. The knowledge to harvest the *Spondylus* was fairly specialized, requiring dives 3–30 m deep and forcefully loosening the bivalves from the rocks. Upon having charted the Pacific waters of Mexico, the periodic presence of divers coming from the south and making landfall before undertaking the return journey will have been an impetus for contact and initiating exchange for coastal communities of western Mesoamerica.

Indigenous societies in coastal Ecuador, based on the regionally expanding harvesting and trading of *Spondylus* shells, would have been in an ideal position to establish such a more complex long-distance exchange system. Over time, and with societies gradually increasing in social complexity, such a system would have evolved to include social valuables that played a legitimizing role in the authority of local chiefs and religious specialists in both western Mesoamerica and the central Andes. Local-level emerging competition between such chiefs would then have triggered the need to increase the frequency of contact, expand the horizons of coastal and sea travel, and, also, encompass an increased diversity of materials brought in (Zeidler 1991).

Discussion

The practice of metallurgy that was introduced in western Mesoamerica through the avenue of harvesting thorny oysters by divers from parts of the central Andes took on its own form, and featured the production of copper objects that extrapolated on pre-existing local forms and added to local expressions of elite identity, a process reinforced from 1200 CE onwards through the addition of alloys, allowing for larger and stronger objects, as demonstrated through the work of Hosler (1994).

Though there are a distinct few object types that, in their fabrication and materials, are virtually identical (bells, fish hooks, tweezers, rings and needles), there are also marked differences between the corpus of metal objects in the central Andes and Central America when compared to that in western Mesoamerica: hammered plates for bodily decoration, either as round disks or elements of body 'armour', are not known from western Mesoamerica, whilst ubiquitous in Central and South America, and the same is valid for three-dimensional objects. Metallurgical technologies were introduced into western Mesoamerica from Ecuador specifically, as appears to be visible from applied alloys for copper and arsenic, crafting methods, and manufactured artefact types. Overall, the connectivity achieved through this maritime trading seems to hold a directional trend that is south–north, although it may be that this emphasis is more a reflection of the archaeological data available. The fact, however, is that the seafaring technology was developed among the coastal communities of Ecuador and it was likely mostly South American indigenous seafarers that visited western Mesoamerica.

Overall, what studies on metal objects and metallurgy convincingly demonstrate are the processes of selective adoption and innovative transformation. Communities in western Mesoamerica seemingly smoothly incorporated metal into their material repertoire. Over the course of several centuries, they developed autonomous specialized networks involved with ore extraction and mastered single steps in the production process of copper and copper alloys and the fashioning of objects.

What we see here is the embedding of technology and copper as a material category and its functional incorporation in local processes of cultural meaning. From the perspective of globalization, this resonates with the processes of agentive reformulation of objects, within the confines of the particular properties of a material, in this case copper. The practice of extracting copper ore and working copper alloys in different manners was introduced in western Mesoamerica at around 600 CE, leading to a selection of pre-existing forms but also the development of new ones, based on an active selection process. What Hosler's studies reveal is that the choices made by metalsmiths in western Mesoamerica were motivated by local variables related to the importance of sound and colour of copper objects, and prominently through small bells. As their technological skills improved, new experiments with alloys were successfully developed and subsequently also passed on to other areas of Mesoamerica, through trade connections that developed after 1200 CE (Hosler 1994: Chapter 7; Smith and Berdan 2003; Shugar and Simmons 2013), and copper-tin and copper-arsenic alloy objects obtained a role in newly developing practices among political elites of the Tarascan Empire.

This active selecting resonates with the hybridity concept, as elaborated for globalization theory by Nederveen Pieterse (2015), describing the amalgamation process that takes place during and after situations of cultural contact. The adoption of metallurgy, and the acceptance by communities in western Mesoamerica from 600 CE onwards of copper objects imported from the central Andes (albeit in limited quantities), alongside the local reconfiguration of this technology and its potential applications, are at the core of what globalization theory tries to understand.

A parallel development is observed in the central Andes, where the trade in *Spondylus* shells was likely an instigating factor in the long-range maritime mobility of indigenous maritime merchants. From 3000 to 1100 BCE, these warm water bivalves were traded inland, inwards to the Ecuadorian highlands, but from 1100 BCE onwards *Spondylus* are exchanged well into the central Andes (in return for obsidian and copper), ultimately reaching down to Lake Titicaca by the time of the arrival of the Spanish.

The exchange between western Mesoamerica and coastal Ecuador is empirically poorly known. No vessels have ever been recovered. The frequency of maritime travel is only indirectly approximated through sea current analyses and seasonal climate patterns. All these daunting unknowns are balanced out by the convincing direct evidence of the introduction of metallurgy around 600 CE and the demand for *Spondylus* molluscs as a driving mechanism behind this introduction, enabling the inference of a more or less regular form of maritime contact. Acknowledging the historical precursors at both regional endpoints of this exchange helps to understand this process.

In archaeological studies in the Americas (but certainly not only there) the notion of the exotic valuable is often invoked (for example Rosenswig this volume). It was referred to in several of the introductory chapters of this book and this chapter mentioned it as well a few times. The work by Mary Helms often figures prominently in such analyses (Helms 1979, 1988, 1992) in arguing the sociopolitical importance of such scarce objects for reasons of establishing or reaffirming claims to local or regional positions of power through access to esoteric knowledge. This forefronting of the acquisition of the Exotic as a driver of globalization, however, is problematic for globalization analyses. Indeed, objects and technologies arriving from beyond particular cultural horizons do have the potential to serve as exotics, but this is certainly not their only destiny. Objects are full of potentialities. Certain copper alloy objects may serve as cultural capital, as the post-1200 CE incorporation in Tarascan elite behavior demonstrates. In turn, *Spondylus* shells from coastal Ecuador can also serve in more ritualized settings in the northern Peruvian lowlands, or function as an index of divine fertility in the Peruvian highlands.

Interesting to note here is the notion of ‘bundling’ that engages with such diverse indexical qualities of objects (Keane 2003). What this notion describes is that objects hold the capacity to transform their meaning and value relative to the context they are in. This should serve as a central consideration for historically informed globalization analyses. Viewed as such, objects and technologies, exchanged across cultural spaces, are full of potential, and globalization theory is in large part concerned with this matter (see also Versluys this volume for the links between object biography and object exchange).

This potential to bring out particular qualities of objects and materials is thus contingent on the context in which such items, and skills that make and work them, are received. Human intentionality leading to seeing something as an exotic is a potential outcome, but only one among many. It is thought-provoking to consider precisely metal in this regard, with its inherent malleability and the ensemble of production steps involved in the creation of metal objects. This reveals metal objects as being especially ‘open’ to multiple receptions. As shown, this diversity seems to resonate well with the data available for metallurgy in western Mesoamerica as well as for the roles of warm water mollusks in the central Andes.

Conclusion

In sum, globalization theory underscores processes of exchange as furthering and adding to local cultural development, as we have seen in the case presented here. This is a subtle analysis that shies away from placing exchange at the core of change. Objects and materials procured from distant places may have been regarded as alien and exotic at first instance, but the dominance of this identification was not long-lived in western Mesoamerica; local communities were quick to absorb metalworking, steering it into new directions and merging it with ongoing cultural processes. What the work by Hosler and others is showing is the local dynamics surrounding metallurgy. The couriers of this knowledge, the Ecuadoran shell divers, ironically, do not centrally feature in the analysis provided for the developments from 600 CE onwards. This is understandable, given the scarcity of empirical evidence for the presence of these divers in the region, but it also has shown that their role may have been limited in reality. As such, the case presented here is quite distinct from other examples in the Americas that discuss imperial strategies of the Inca and Aztec, to name the two most well-known ones. Brought out here was one of the emphases of globalization theory, namely that of local flexibility and amalgamation by communities that participated in an extraordinary long-distance exchange. This exchange brought in metal objects with particular significance. These were then given new meaning upon arrival, but not forgetting about their history and special nature (cf. Kopytoff 1986).

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3.5

Globalization without markets?

Population movement and other integrative mechanisms in the Ancient Andes

Bill Sillar

Integrative mechanisms in the Ancient Andes

Many of the behaviours that shape modern globalization were common to earlier periods and places (Feinman this volume). But some of the primary economic structures and technologies that drove early globalization of ancient Eurasia were of less significance in the Ancient Andes. Latter pre-Hispanic Andean economies undoubtedly had a 'complex connectivity' (Jennings 2011: 2, citing Tomlinson 1999: 2) with a dense network of intense interactions and interdependencies that integrated disparate people through the long-distance movement of goods, ideas, and individuals. The primary forms of connectivity (Jennings this volume) and networking (Knappett this volume) that shaped Andean societies are expressed in the transfer of technologies and the borrowing of stylistic elements as well as the large-scale movement of people. Although the long-distance movement of artefacts reveals important aspects of cultural interaction in the Andes (Vaughn 2006), in comparison to Europe and Asia the range and quantity of goods moving long distances is exceedingly limited. At a Roman period villa in Britain we find significant quantities of heavy amphora from the Mediterranean, Samian dining wear from Gaul, and probably some colour-coated drinking vessels from Germany as well as a wide range of forms from Romano–British pottery industries from 10 to 200 km away. In contrast, in all the excavations of Inka period sites in the Mantaro valley, a region strongly re-organized under Inka rule, over 99 per cent of the pottery, including Inka-style pottery, was locally produced with only a few sherds from the Junín and Chimu, and two plate fragments of possible Cuzco origin. Shells from the Pacific coast, and bronze using tin from Bolivia were imported, although still in very small quantities (Earle 2001). While some prestige materials moved long distances there is little evidence that the economic systems of any period in the Andes facilitated the sequential trading of goods as seen along the Silk Road, and the quantity of artefacts that were being moved is minimal in comparison to what was happening in the Roman Empire. This is only partly due to the lack of navigable rivers and a 'Middle Sea' (Broodbank 2013) or the absence of traction animals and wheeled vehicles, for in the Andes llama caravans and people were capable of regular long-distance transport. When the Spanish arrived in South America they remarked that the Inka empire had no money or markets – although recent debate has emphasized the existence of barter as a component within Ancient Andean economies (Hirth and Pillsbury 2013) – and speculated about the possibility of pre-Hispanic fairs (Stanish and Coben 2013). Ancient Andean economies cannot be described as market economies, but there is strong evidence for the transfer of technical skills, styles, ideologies, and languages to attest for strong social interactions across the Andean region. The Spanish reported how large parts of the Andean economies were structured through hierarchies of social obligations, where people gave their labour as a duty to kin groups, ethnic leaders, and the state in return for feasting, some redistribution of goods and infrastructure. Although no individual in the Andes could comprehend the full scale of connectivity that was taking place, many connections were being made through networks of structured social relations. This presents a challenge for how we identify labour exchange in the archaeological record, but it is also a challenge if we characterize globalization as a connectivity that is beyond the self-awareness of the individual. Within the wide region of the Pacific Coast and Andean highlands running from Chile and Argentina to Ecuador, there were a range of social and economic systems in place, and these changed over time. Craft specialization was most significant in the polities on the Pacific coast of Peru, and the region of modern Ecuador and Northern Peru was engaged with more trading activity; both of these areas were engaged with by the Andean highlands long before their incorporation into the Inka Empire, forming an important part of Andean 'complex connectivity'.

To understand interaction in the Andes, some fundamental assumptions need to be questioned: skilled craft products are not necessarily made by full-time craft specialists (craft goods may be made seasonally by agriculturalist or administrative elites), the economy may not have been structured through the exchange of finished goods (the Inka economy was structured primarily through labour obligations; markets and commodity values played a minimal role), the movement of artefacts does not adequately reflect the degree of interaction (people moving for short-term labour obligations and long-term colonization were more significant than the movement of goods), urbanization did not develop through the pull of market exchange (ritual and administrative centres were more significant to settlement organization). With these caveats, there is good evidence for large-scale interaction and a 'globalizing tendency' throughout the Andean world.

This chapter presents a broad description of cross-cultural and interregional contacts that were taking places in the Andean highlands and Pacific Coast of modern Peru, Bolivia, Chile, Argentina, and Ecuador from around 500 CE till the period of European colonization around 1600 CE. I review mechanisms of social and economic integration that shaped Andean globalizing tendencies through a review of archaeological evidence as well as early historical records. Within this process, artefact form and decoration provide a medium that can express social interaction. Andean archaeologists (Willey 1945) have identified the widespread adoption of shared iconographic motifs as 'horizon styles'. These have been used to define a chronological sequence, with three phases of regional integration referred to as the Early Horizon (EH, Chavín style: 9–200 BCE), the Middle Horizon (MH, Tiwanaku and Wari styles: 500–1000 CE) and the Late Horizon (LH, Inka style: 1400–1532). The Early, Middle and Late Horizons, were periods of integration expressed in the spread of common iconographic motives and/or conquest and colonization by expansive states (See also Lau this volume). The periods between the horizons, the Early and Late Intermediate Periods (EIP and LIP), have been characterized as a time of social collapse or localized regional developments. This chapter will consider the later part of this sequence, where there is the greatest evidence for wide regional integration: the Middle Horizon (MH), Later Intermediate Period (LIP) and Late Horizon (LH).

The landscape

Pre-Hispanic people developed a sophisticated range of techniques to produce and acquire resources. They grew crops (e.g. maize, cotton, potatoes, quinoa, beans, chili, gourds, coca) and invested much labour in the improvement of soil fertility and irrigation using raised fields, reservoirs, terraces and canals. Agricultural production took place in association with llama and alpaca herding, which not only provided meat but also wool for warm clothing and blankets: an essential pre-requisite for large-scale occupation of cold high-altitude areas. Llamas are the only animals capable of transport, carrying a relatively small load (usually 25–40 kg) that has to be split evenly on either side of the animal's back. This is ideal for transporting grain or salt, but llamas are incapable of transporting awkward-shaped, long or heavy objects; these had to be transported on peoples' backs.

The frozen heights of the Cordillera Real and Cordillera Blanca rise to altitudes exceeding 6,000 m. Above 4,000 m agricultural production is limited, but an extensive area of *puna* provides grasslands for camelid grazing. Below 4,000 m there is extensive agricultural production concentrated around the rainy season from November to May, leaving much of the dry season for non-agricultural work, encouraging a distinct seasonal rhythm to many social and economic activities. The slopes dropping down to the warm and humid Amazonian rain forest to the east are the source of important resources of timber, fruit, and exotic feathers. The Andean mountains pull all the rain out of the Atlantic air currents, leaving a rain shadow on the western side facing the Pacific so that the coastal plain of Chile and Peru includes the driest deserts on earth, yet the Pacific Coast benefits from warm fertile river valleys and abundant marine resources. Environmental and social differences have led to major distinctions in the development of these regions. To characterize (or stereotype) these: before the conquest, some of the most densely populated areas of the Andes were the *puna* highlands, such as those around Lake Titicaca, which focused on llama herding; the highland valleys were characterized by agricultural communities; and the coastal valleys had agriculture alongside the exploitation of marine resources and a greater intensification of craft production; the eastern slopes of the Amazon basin were less developed, with a more dispersed population practicing agriculture and exploiting forest resources.

The Middle Horizon

The vast areas that were dominated by the Wari Empire and Tiwanaku culture (Figure 3.5.1), which shared some elements of their iconography, justify the description of this period as a 'Horizon'. For instance the staff deity motif, a full-frontal figure standing on a raised platform holding a vertical staff in each hand (Cook 2012) first appears in the iconography of Early Horizon and became a central motif in the iconography of both Wari and Tiwanku. Wari developed out of the Huarpa culture in Ayacucho, but also incorporated motifs and techniques derived from Nasca (Schreiber 2001, 2005) and from the Yaya Mama traditions, to develop the Southern Andean Iconographic Series (Isbell 2008). Thus cultural interaction is seen in the borrowing of motifs and techniques to create new hybrid forms that expressed some combining of ideological and religious traditions. However, Wari and Tiwanaku had quite distinct social and economic structures that are partly expressed in the architecture of their ceremonial centres (Janusek 2008; Isbell 2008). Tiwanaku had large open plazas that could accommodate hundreds of pilgrims and depicted their iconography on monumental stonework. In contrast, the Wari capital, Huari, had high walls that limited visibility rather than elaborating large gathering places

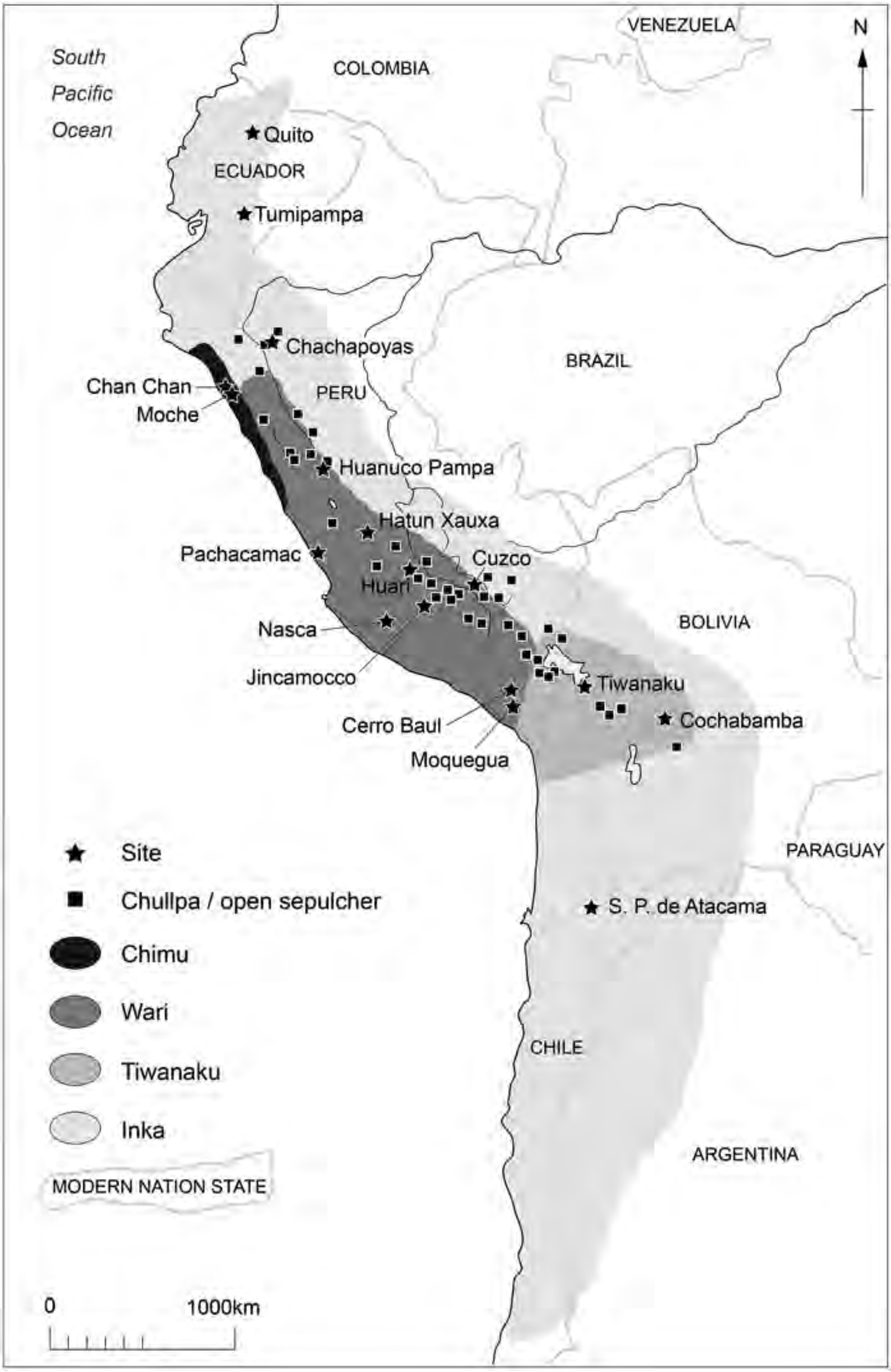

Figure 3.5.1 Map showing Tiwanaku, Wari, Chimu and Inka spheres of influence (these were not bounded territories, but networks of roads linked administrative sites, colonies or areas that adopt stylistic elements), major sites mentioned in the text and an indication of the spread of *chullpas* and above ground sepulchres (as noted in Isbell 1997)

(Isbell and Vranich 2006). Schreiber (1992: 280) suggests that Tiwanaku 'brought people in' to participate in large public ceremonies whereas Huari focused on smaller scale rituals for the Wari elite. Where the Tiwanaku sphere of influence appears to have been integrated primarily through the draw of its ceremonial centre, the Wari conquered an extensive territory and used large administrative centers to exploit the labour of conquered subjects.

Janusek (2004) argues that Tiwanaku was a multi-ethnic city; distinct barrios maintained kinship links to more distant regions where some Tiwanaku-style iconography is also reproduced in local material culture. The city of Tiwanaku supplemented its own *puna* area resources by establishing 'colonies' or diaspora communities in the maize-growing area of Moquegua, Osmore River valley (Goldstein 2005). Analysis of the archaeological evidence of ceramics and textiles as well as burial patterns and housing to compare these colonies to their 'parent communities' in the Altiplano suggests a 'reliance on socially embedded reciprocity and productive colonization for exchanging virtually all categories of goods and services' (Goldstein 2013: 379).

While the elite of Tiwanku seem to have relied on the fame of their impressive cult centre and diaspora communities to maintain extensive regional contacts, the Wari were an expansive empire with substantial parts of their economy shaped by conquest. The Wari Empire incorporated a vast territory from Cajamarca 800 km north of Huari to Moquegua some 525 km south of Huari and it lasted for approximately four centuries (600–1000 CE). In areas that already had significant social organizations Wari-style grave goods suggest that local elites were sometimes co-opted into Wari state activities (Schreiber 2001: 87). The Wari territory is characterized by a wide distribution network of obsidian from the highlands, accessing arsenical bronze from the coast and tapping into supplies of *spondylus* shells from Ecuador, all of which are likely to have been supported by llama caravans. In areas of limited prior development, a phase of military conquest (*c.*600–700 CE) and construction of preliminary administrative centres (such as Viracochapampa, Jincamocco) were followed by investment in agricultural production and even largerscale administrative facilities in locations such as Cerro Baúl and Azángaro (Schreiber 2001). In the Sondondo Valley, the site of Jincamocco was enlarged, possibly as accommodation for imported labourers who helped to build and manage the new canals and terracing (Schreiber 1992, 2001). In the upper Nasca Valley, local populations were moved out and a new Wari site for highland labourers was established at Pataraya adjacent to agricultural fields suitable for coca growing (Edwards 2010), and an immigrant workforce constructed households at Cerro Mejía adjacent to Cerro Baúl (Nash 2001). In the Vilcanota Valley, the Wari constructed a vast administrative site at Pikillaqta and a smaller administrative site at Raqchi. At Pikillacta, 501 small conjoined buildings roughly 5 m long with hearths, ash, and occupation debris suggest living quarters (McEwan 1991: 117); similarly the 340 small rooms in the central sector of Azángaro and 152 adjoining rooms in Raqchi are all within large enclosure walls, suggesting medium-term accommodation for a labour force (Sillar *et al.* 2013). Each of these sites was associated with large-scale aqueducts and terracing, as the Wari exploited the labour of conquered groups for agricultural production (Schreiber 2001). There can be little doubt that the Wari had a very large impact on the populations of all of these regions moving people about for labour projects. One potential route to evaluate the effects of Wari interventions is to consider language change. The Quechua language originated in central Peru, while Aymara originated in the south-central coast; both languages are thought to have spread into the south-central highlands up to 2,000 years ago and the most likely drivers for this were the Wari (Heggarty 2008). This degree of language change could not have been achieved without large-scale integration through deep-seated interaction and the movement of people, and Wari conquest and labour extraction are the only significant vectors identified for this process.

On the Peruvian coast, the major indicators of Wari influence are changes in local pottery styles, where Wari iconographic motifs and decorative features are combined with local features to create new hybrid pottery styles. This is a feature of the lower Nasca area around Ica, where the Atarco style incorporates Wari elements. Nievería-style ceramics, which emerged following the demise of Lima culture, also blends local and Wari elements, and Wari-style textiles and pottery are found with the elite burials in Ancón and the Supe Valley. The wide distribution of Wari-related iconography suggests a high degree of interaction, although it is noticeable that most of this high-quality pottery was being made locally by, and for, the elite. While interaction is documented in the movement of some goods, it is more strongly expressed in the borrowing of styles and lifeways that suggest deep cultural contact.

The Moche polity on the north coast of Peru emerged around 100–200 CE, pre-dating the Wari by some 500 years. The strongest Moche 'kingdom' was located around the Huaca del Sol and Huaca de la Luna at Moche, but it was interacting with a series of 'kingdoms' to the north, with sites like Sipan and San Jose de Moro that shared similar iconography. The building of huge mounds required a large *corvée* workforce that impressed their makers' marks on millions of adobe bricks. The amount and quality of craft products suggest a much greater degree of craft specialization than in the highlands at this time (Bawden 1996), and there is evidence for intensive metalworking, weaving, and ceramic production at Moche (Chapdelaine 2002) and Pampa Grande (Shimada 2001: 200), where elites could control production and access. Excavations in the tombs of Sipan have shown that the elite wore the ritual paraphernalia made in the metal workshops. But, rather than the elite depending on the import of prestige goods for their status, Uceda and Armas (1998) state that all the fine-ware pottery used for funerary and ritual purposes at Moche was probably made in the central Huaca de la Luna workshop. Indeed, fine-line pottery depictions of rituals (Donnan and McClelland 1999) suggest that the potters were intimately involved in ritual practices and may have been part of the elite. Moche society seems to have been largely internally focused, but it is likely that they were exchanging some arsenical bronze into the highlands and in the final phase (Moche V) they started copying Wari pottery designs (Castillo 2001). This was followed by the abandonment of the raised platform mounds and a change to seated and flexed burials, which are more characteristic of the south coast and Wari.

Wari's occupation of Pikillaqta came to an abrupt end around 1000 CE, when the entrances were deliberately sealed and the site later burned (McEwan 1996: 83–84). Janusek (2008: 295) highlights the defacing of cult images at the time of Tiwanku abandonment around 1100 CE, suggesting a major reaction against ceremonial activities at the heart of the city. Schreiber (2005: 250) suggests that hundreds of Wari pots at Pacheco may have been smashed by local people rejecting Wari rule, including jars depicting the staff god, which were 'killed' by blows to the chest or face of the authority figure. Indeed, the staff god image, which originates in the Early Horizon and had been used for over a thousand years, and other elements of the Southern Andean Iconographic Series were no longer produced in any medium following the collapse of Wari and Tiwanaku; the religious understanding that had united a wide area and underpinned elite power was widely rejected.

The Late Intermediate Period

The demise of Wari and Tiwanaku sees a fundamental change in social organization throughout the Andean highlands. The period, stretching from the collapse of Wari (*c.*1000 CE) to the expansion of the Inka Empire (*c.*1400 CE) (Figure 3.5.1), is understood as one of regional differentiation and referred to as the Late Intermediate Period (LIP). In the highlands, the abandonment of ceremonial and administrative centres was replaced by the construction of new hilltop settlements with circular houses that show little hierarchical differentiation. There is also a widespread adoption of above-ground burial towers, *chullpas*, for collective burials; some of these are elaborate structures with carved stone, but many are simpler structures that provided a familial focus for ritual practice (Sillar 2012). On the south coast (Menzel 1976) and Rio Grande de Nasca drainage system (Rowe 1986), there is a contemporary change to collective burials. This suggests a rejection of the focus on individual burial, and the pomp and splendour of state religious practice, in favour of a more community or family orientated social organization. Isbell (1997) argues that above ground sepulchures were first developed around 200 CE in or near the Huamachuco area, and adopted in Ayacucho around 700–800 CE so that it is probable that this change in burial practice found its way into the Vilcanota Valley as a part of the Wari phenomena (similar to the spread of Christianity within the Roman world), but it continued as an even more dominant feature within the LIP. The retreat to the hills and adoption of circular houses and simpler *chullpas* was a surprisingly 'global' change that expresses a shared rejection of the previous worldview from Lake Titicaca to Junín (Stanish 2003; Arkush 2011; Wernke 2006; Sillarand Dean 2004; Parsons *et al.* 2000).

Andean households must always have engaged in some small-scale barter to gain access to crafts and produce they did not make or grow themselves, and camelid caravans would have played a significant role in coordinating the movement of goods. Along the central Andes many high altitude herders and valley agriculturalists developed dualistic social structures, with distinctions in language and dress used to maintain separate identities while having interdependent economies that relied on exchange of produce across the two zones (Duviols 1973). Archaeological survey work in Junín (Parsons *et al.* 2000) and the Colca Canyon (Wernke 2006) suggests that this highland/valley interdependent duality emerged around 1000 CE. This was probably a direct response to the collapse of the Wari economy: the intensification in both valley agriculture and highland herding which had relied on Wari redistribution required new mechanisms of exchange between highland herders and valley farmers. By the Late Horizon, several large ethnic groups included both highland pasture and irrigated agricultural land within their territories, with ethnic leaders sponsoring the internal exchange of goods and labour (Murra 1972). Ethnic groups also sent people to colonize small areas beyond their core territory. Temporary residents who remained loyal to the leaders and grew resources such as coca, cotton and chilli to send back home worked these 'archipelagos'. Far from being a time of social collapse, the Late Intermediate Period in the highlands must have seen a good level of social interaction in the spread of similar lifestyles and mortuary rituals, with highland–valley exchange and small-scale colonization being coordinated through the social obligations within ethnic groups. The supply of wool and textiles remained an important component within this exchange that helps explain the economic power of highland pastoralists who were supplying both the Andean valleys and coastal communities, including the Chimu, with fine camelid wool (Rowe 1980: 85–86) and no doubt returning to the highlands with coastal products.

The Chimu state emerged around 1000 CE, after the end of Wari. The Chimu first consolidated their base in the Moche, Chicama and Virú valleys of the Peruvian North Coast, and then expanded out to build administrative centres at Farfán, Manchán, and Túcume from around 1300 CE. The capital of the Chimu state was Chan Chan, and McEwan (1990) suggests that the architecture at Chan Chan borrowed extensively from Wari imperial architecture to develop the large royal enclosures (*ciudadela*). The *ciudadelas* had large-scale storage, acting as palaces where the rulers could accumulate raw materials, staple goods, and luxury items, with large plazas for ritual celebrations. At the height of its power, Chan

Chan had a population of around 30,000 (Topic 1990) and was probably the largest example of 'urbanism' in the Americas, but it was strongly focused on the elite palaces which sponsored the production of prestige craft goods and controlled a centralized redistributive economy. Rostworowski (1977) used Spanish documentary evidence to highlight the development of labour specialization with distinct groups of full-time craft producers, but she also identified exchange within these coastal polities; more recently the evidence for craft specialization and costal exchange has been supported by archaeological analysis (Topic 1990; Tschauner 2009).

The Late Horizon

The emergence and consolidation of the Inka in the Cuzco region took around two centuries (Bauer 2004), followed by the rapid conquest of an enormous empire (1400–1533 CE) (Figure 3.5.1). When the Inka conquered new areas, the population was expected to continue their allegiance to their ethnic leaders. In return these leaders were expected to coordinate a rota (the Quechua word *mit'a* means 'to take a turn') of workers to contribute labour to Inka state projects, and for the rest of the year households continued to manage the fields, herds, and other activities of their home communities (Murra 1982). During the *mit'a*, the Inka were expected to provide labourers with work materials as well as food and drink (Murra 1980). This has significant archaeological implications, as the Inka taxation is evident in the infrastructure of the state, but is not very marked by the acquisition of goods in domestic households. D'Altroy (2015: 398) points out that for one well-recorded census (of Huánuco) only one-ninth of the *mit'a* would produce archaeological evidence in the creation of state architecture or pottery. Inka officials worked with ethnic leaders to maintain a census of the population and delimit labour demands, and the Inka used the *khipu* (a recording device of knotted strings) to keep data on population size, work allocations, agricultural production, camelid herds, store contents, etc. One name for the Inka Empire was *Tawantinsuyu: tawa* ('four'), *ntin* ('together') *suyu* (usually translated as 'quarters' or 'parts'), but Bertonio ([1612] 1984: ch. II, 331–32) translates *suyu* as 'that part of a task that one or more persons takes to work on', leading Harris (2007: 151) to suggest that the empire was conceived of as a gigantic labour project, encapsulating the ideals of the *mit'a* in its name.

The Inka also extended the tradition of sending permanent colonists (*mitmaquna*) to work 'archipelagos', moving some groups more than 1,000 km to create new enclaves. D'Altroy (2015: 373) estimates that current assessments of Spanish records suggest that between a quarter to a third of the 10–12 million people in the empire were resettled. 'Colonization in the Inka Empire had many layers, as it was practiced by the state, the official religion, Inka aristocracy, ethnic lords, and local communities. Establishment of the colonies accomplished military, political, economic, social, and ideological goals' (D'Altroy 2005: 292). Although there are many Spanish reports confirming the large scale of this re-settlement policy, identifying the origin of specific colonies using archaeological evidence has been difficult, possibly because *mitmakuna* were expected to adopt the practices and way of life of the territory and peoples they moved to, other than maintaining the clothing of their original ethnicity (Cobo [1653] 1988: 190). Most populations used locally made pottery without any substantial change to the subsistence evidence within the houses ((D'Altroy 1992), but see D'Altroy (2015: 376–77) for some, limited, examples of identifying *mitmakuna*) and current work on skeletal morphology, isotope analysis and DNA provides promising avenues to address this question (Haun and Cock Carrasco 2010).

A large number of administrative centres were constructed throughout their empire, e.g. Hatun Xauxa, Pumpu, Huánuco Pampa, Cajamarca, Hatuncolla, Chucuito, Chuquiabo, Charkas, Paria, Inkahuasi, Tambo Colorado, Aypate and Caxas (Hyslop 1990; Astuhuman 2008). These administrative centres were an 'imposed urbanism' (Morris 1972), where a transient population performed their labour tax, filled the stores, coordinated military duties, or engaged in state ceremonies and then left again. The central core of these sites had an Inka plan, and several included large plazas with raised platforms where state rituals and large public feasts were carried out. Inka administrative sites lacked the organic growth and cemeteries of a permanent population and never developed into cities or market towns, with many abandoned after the Spanish conquest. Morris suggested that the location of administrative centres, often on vacant land at the boundaries of ethnic groups, was intended to limit the impact on the resources of indigenous groups, while maximizing the integrative function for the empire. For instance, Huánuco Pampa acted as the hub for at least five ethnic groups who supplied labour to the Inka, but within the territory of these ethnic groups there is very little material evidence of Inka influence (Morris and Thompson 1985). Administrative centres were only one layer within several overlapping networks of religious, ceremonial, storage, production, and defensive sites (Hyslop 1990). These were united by an extensive system of nearly 40,000 km of prepared roads, with suspension bridges to cross deep river chasms and causeways over marshes (Hyslop 1984). As an Inka subject you were never far from a road, and thus always connected to the empire and the labour demands of the state. Large-scale and widely distributed systems of storage buildings (*collcas*) filled with crops as well as textiles, military supplies, and craft goods could supply the needs of the military, state works, feasts and other state activities (LeVine 1992). The largest concentration of *collcas* recorded is in Mantaro, with 2,753 storage buildings; other high contenders are the 2,400 *collcas* serving the state farm at Cochabamba, and 1,717 at Campo de Pucará (Argentina) (D'Altroy 2015: 411), with many more at each administrative site and some at the *tambos* (resting station, located roughly every 20 km along the Inka road).

Cuzco was the origin place and ritual core of the empire. Cuzco was built by vast numbers of conscripted labourers (Bauer 2004), but, these were mostly seasonal workers, and migrants could not stay in the city unless given a specific role by the Inka. This meant that the city did not grow exponentially and never became as large as Tiwanaku, Huari, or Chan Chan. Inka rulers did not spend their time based in Cuzco. The narrative of each Inka ruler's life reads like a travel diary. Like his subjects the Inka ruler was frequently on the move as he directed military, religious, and administrative activities. Huayna Capac spent much of his life in Ecuador supporting military conquests, and he is also recorded as being at numerous other places to resolve inter-ethnic disputes, and establish new religious and administrative centres. This included setting up new agricultural production sites such as in Cochabamba, Bolivia, where 14,000 *mit'a* workers were brought in, some of them from over a thousand kilometres away (Wachtel 1982). Ramírez (2005) argues that the name 'Cuzco' referred to the emperor rather than the city. Rather than seeing the city as the centre of administration, we should see the emperor as a mobile facility, with much of the imperial administration, military coordinators, and *khipu* record keepers moving with him.

The Inka developed a characteristic ceramic tradition (Rowe 1946) that included the iconic *aryballus* jars used to make and serve *chicha* beer for Inka feasting and rituals. Although only very small quantities of the pottery made in Cuzco were exported (e.g. D'Altroy and Bishop 1990: 133), the form and style of Inka pottery was copied widely. In some cases this was made at artisan centres set up by the Inka state. For instance, 1,000 weavers and 100 pottery making families were moved to a new craft production centre at Milliraya (near Lake Titicaca) under Inka Huayna Capac (Spurling 1992). These state artisans were given local agricultural and pasturelands as well as more distant land suitable for growing maize (Murra 1978; Spurling 1992).

Like many activities that in other societies would be ‘full time,’ such as craft production, mining, construction and warfare, the Inka organized these on a seasonal basis so that they could be combined with agricultural and herding duties at the household level and justified through the Inka system of the *mit’a* labour tax. Under the Inka, there was an important shift from copper-arsenic bronze that had previously characterized the Peruvian coast and central highlands to tin bronze – tin only became available after the Inka conquest of Bolivia, yet the copper/tin alloy becomes ubiquitous throughout the empire and is perhaps the best example of a widely distributed material that was acquired by even modest households under the auspices of the Inka state (Lechtman 1984; Owen 2001).

Although Murra (1982: 288) suggested that the Inka economy was based only on labour obligations, in fact the Inka adapted as they expanded and met alternative economic systems. In his study of highland Ecuador, Salomon (1987) identified market exchange of products such as salt, coca, chilli, and cotton, with shell beads sometimes acting as a medium of exchange. The Andean region had been acquiring marine shells from Ecuador through exchange networks since the Middle Horizon, and when the Inka took over this region they tried to integrate this ‘market system’ into their own model of hierarchical tribute. Similarly, the Chincha ethnic group had been involved in the long-distance trade of *spondylus* shells and the Inka seem to have used this to gain access to the shells (Rowstworowski 1977). The people living on the Peruvian Coast inherited a high degree of occupational and craft specialization from the Moche, Sican, and Chimu societies, and the Inka succeeded in acquiring some of this production. Prestige and ritual goods (such as *spondylus* shell, fine textiles and silverwork) were used by the Inka to placate the elites of subject ethnic groups, as gifts to cult centres, and to exchange with groups not yet under Inka domination, while the regional economy of the highlands was primarily driven by labour obligations which the elites helped to coordinate for the Inka (D’Altroy and Earl 1985).

It is possible that the Inka Empire had reached its limit when the Spanish arrived, the civil war between the half-brothers Huascar and Atahualpa marking an inevitable fragmentation. Further expansion of the empire was difficult as it would require more effort to subjugate and administer the dissipated and less-structured societies at their borders, and the Inka were probably content to acquire tropical wood and exotic feathers through exchange with the eastern lowlands. There is only very limited evidence for inter-American levels of exchange prior to European contact (e.g. the widespread adoption of maize, and some exchange of gold and emeralds), but the Inka were ignorant of Aztec markets and warrior societies. Yet Caribbean islands were in contact with Mesoamerica to their east and the coasts of Colombia and Venezuela to their south and the likelihood that a greater integration of North and South America would have been achieved eventually is high. Indeed, the rapid spread of smallpox across South America in advance of the European colonizers shows that a chain of human interconnections did link these worlds, even if they were not integrated.

Spanish colonialism

The Spanish conquest was swift. Pizarro’s small band of mercenaries invaded just as the civil war between rivals competing to become Huayna Capac’s successor came to its culmination. The Spanish captured the new ruling Inka, Atahualpa, and used alliances with disgruntled indigenous elites to rapidly gain control of the empire. Smallpox spread, devastating the population and indigenous social structure, the fragmentation of the ethnic groups, and much of the canals, terracing and road system fell into disrepair. Native communities were granted as part of large *encomiendas* to the Spanish conquistadors, who placed even greater labour demands on the dwindling population than the Inka had done. In the 1570s, the remaining native population were resettled into *reducciones* with churches and marketplaces as the Spanish imposed their religion and economic order. Some parts of indigenous society were very successful participants in these newly developed markets, such as llama and mule caravan traders in the *puna* who controlled a high proportion of sixteenth-century trade. Under Spanish rule many new mechanisms of global integration were incorporated into the Andean world: money, market trade, writing, and transport by ships and carts. The discovery of silver at Potosi (in 1545) led to the setting up of large mines and the Inka *mit'a* was re-instigated as a Spanish colonial labour tax. The silver from Potosi fed the European economy, allowing wealth to be held and exchanged by those who were not 'landed' aristocrats, contributing to the development of capitalist economies around the world.

Discussion

The production and exchange of prestige goods and ritual paraphernalia was a significant feature of elite power in the ancient Andes (Goldstein 2000; Vaughn 2006), but this long-distance exchange was a tiny part of the economy. Even within the two major empires, most of what we see as classic 'Wari' and 'Inka' material culture was locally produced, and there are interesting examples of prestige and ritual items being made by, as well as for, local elites. I agree with Jennings (2011) that the Andean world was developing 'complex connectivity', but I have placed less emphasis on long-distance distribution of artefacts as I feel this actually under-represents the degree of interaction and connectivity that was taking place across the Ancient Andes. While Inka economic organization affected the distribution of goods, as expressed in the spread of tin-bronze and *spondylus* shells, as well as the vast storage system of the empire, the main integrative mechanism was the movement of people who travelled widely to work for ethnic and state demands as seasonal workers, and longer-term colonizers as well as with camelid caravans. The Inka and Wari state investment in roads and administrative sites, etc. is one aspect of this, but the production of hybrid artefacts and transfer of technologies are also illustrative of strong social contact. This was not just under state societies, as the widespread response to the collapse of Wari and Tiwanaku and adoption of *chullpas* illustrates strong connectivity even in the 'intermediate' period. In relation to the various markers or trends that Jennings (this volume) suggested characterize an era of globalization, we have seen evidence of long-distance integration of economic, political, and social processes; local practices that were transformed by the influence of external groups; languages and iconographic motifs being spread over large areas; previously distinct groups adopting similar practices; as well as the vulnerability of these deeply-embedded connections following the arrival of the Spanish.

Although historic records make it clear that mobile labour was essential to the Inka state, it has been difficult for archaeologists to recognize where the people doing this work came from. Yet the degree of language change in the Middle Horizon, and the vast infrastructure built by the Inka show that this mobile workforce had a huge effect on society. Globalization is usually seen as a connectivity that is beyond the self-awareness of the individual. In contrast, the Inka economy placed personal social obligations at its core, but it succeeded in integrating tens of thousands of people, bridging ethnic and geographical differences over thousands of kilometres. This movement of people must be central to any conception of globalization.

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3.6

Conquest worlds

Aztec and Spanish experiences in Mexico, 1428–1570 CE

Frances F. Berdan

Introduction: concepts, time, and place

Globalization is about processes and connections. It focuses on expanding systems of human activity, especially those involving economic and political units. Its hallmark is the notion of increasing interconnectivity, along with increasing awareness of those connections (Jennings this volume, Knappett this volume). Globalization leads to ever more intense and complex connections among groups (whatever their scale), resulting in greater interdependence and, to some extent, greater homogeneity (e.g. through adoption of others' styles, integration of culturally diverse groups, etc.). Within its definition are often included related processes such as a loss of diversity, creation of new forms of differences, the redefinition of borders, increased migration, the development of diasporas, and environmental degradation (Robertson this volume).

While the Aztec known world cannot be considered 'true' or worldwide globalization any more than the Roman empire, I believe that the basic tenets of the concept of globalization are still useful in the context of this more restricted geography. The same is true for the Spanish empire prior to 1570, although this was an empire of considerably greater geographic dimensions than that of the Aztecs. Still, it did not span the globe. But this chapter emphasizes process over scale (Feinman this volume). It examines the nature of interconnections established under Aztec rule during its 93-year imperial expansion, and the subsequent processes of change as that same Aztec domain fell under the more expansive and omnipotent rule of the Spanish empire beginning in 1521. In both of these instances, globalization processes generated new opportunities and created new problems for conqueror and conquered alike.

The temporal end points in this chapter, 1428 and 1570, were not chosen at random. The year 1428 marks the creation of the Aztec Triple Alliance, an expansionistic coalition of three city-states that spread its military thrall over much of central Mexico over the ensuing 93 years. Spanish forces destroyed that empire, but not the indigenous culture, in 1521, followed up by Spanish conquests throughout central Mexico over the next decade. By 1570, the Spaniards had 50 years of colonial experience in Mexico; conversely, the native peoples had 50 years of adjustments to their new lords of the land. Conveniently, the year 1570 abuts neatly against 1571, identified by Flynn and Giráldez (2006) as the year when 'true' worldwide globalization began.

The Aztec empire developed in a broader cultural region labelled Mesoamerica, encompassing most of present-day Mexico (excluding its northern deserts), all of Guatemala and Belize, and the northern portions of El Salvador and Honduras. These boundaries delimit the area's geographical range of high civilizations in pre-Columbian times. While almost entirely within the tropics, the region nonetheless displayed great variation in ecological zones. It also experienced the development of a large number of self-conscious and visibly differentiated ethnic groups. How this geographically and culturally diverse region became integrated first through Aztec hegemony and then through Spanish colonialism is the subject of this chapter's story.

The Aztec known world, 1428–1521

The Aztec empire was born in 1428 after a desperate war among competing city-states in the Basin of Mexico. On one side: rival brothers and heirs to the throne of Azcapotzalco, a Tepaneca city-state that had dominated the Basin for several decades. On the other side: a coalition of the Mexica of Tenochtitlan and the Acolhua of Texcoco. The Mexica and Acolhua emerged victorious, gaining control of much of Azcapotzalco's former territory. The new coalition broadened its political base by inviting the Tepaneca city-state of Tlacopan to its alliance, creating a powerful and expansionistic Triple Alliance (Figure 3.6.1). Over the subsequent 91 years, this entity first solidified its control within the Basin of Mexico and then militarily and politically spread its dominance over more distant lands. As the empire grew, the Mexica emerged as the dominant partner in this expansionistic enterprise, although it is usual to speak of the Triple Alliance empire, or Aztec empire.

By 1521, when the Triple Alliance collapsed, the known world of the Mexica and their allies encompassed lands from Pacific to Gulf coasts, north to expansive deserts, and south to the borders and coasts of the Mayan states. The centre of their world continued to be the Basin of Mexico, more specifically their capital city Tenochtitlan, and yet more specifically their *Huey Teocalli* (Great Temple, or Templo Mayor). It was from here that they measured their world, vertically through the 13 heavenly and nine underworld layers, and horizontally across the terrestrial landscape. This was their known world, and it included lands they ruled through conquest and controlled through negotiations, and also lands they did not (or could not) control at all: especially the Tlaxcallans to the east, the Tarascans to the west, and the several Mayan states to the south. Nonetheless, they actively interacted with these groups beyond their imperial boundaries through ritualized or more purposed warfare, through commerce, or through political dealings. While the empire was young and suffered vulnerabilities, it nonetheless was recognized as the most powerful military, political, and economic force ever to emerge in central Mexico. The imperial thrall was all the more remarkable in light of the transport of the times: all people and their goods moved either by foot or by canoe where possible. This world was a globalized one: in the course of striving to dominate their known world, the Mexica and their neighbours stimulated and in some cases magnified economic, social, political, military, and religious connections that promoted integration of the many involved polities and culturally diverse groups. How did these processes play out in the complex and dynamic world of the Mexica?

Some themes in Aztec (Mexica) globalization

The Mexica and their allies inherited most of their essentials from earlier civilizations: visible social hierarchies, city-state political entities with built environments meant to impress, competition among city-states manifest in almost constant warfare and the formation of fragile alliances, lively commercial relations, and a complex religious world, parts of which were shared

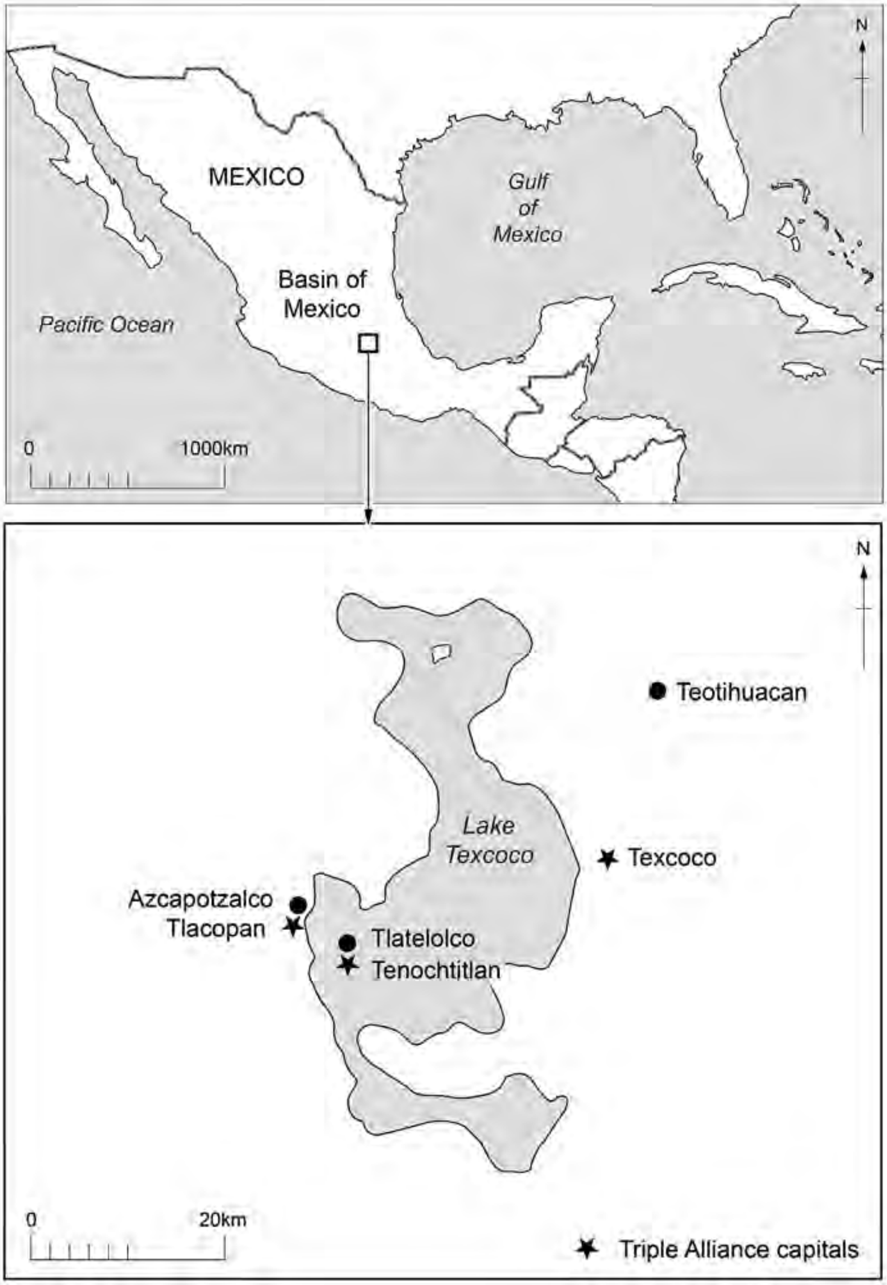


Figure 3.6.1 Map of the Late Postclassic Basin of Mexico

across city-states, ethnic and language groups, and regions. Much of this was intensified during Aztec imperial rule, in part associated with a major population surge and increase in the scale and extent of urbanization. Political fragmentation, hierarchy, commerce, and religion were especially instrumental in the establishment and reinforcement of the vast and complex connections that defined the Aztec globalized world.

Political fragmentation: competitive city-states

Most of the Aztec political world was divided into numerous autonomous or semi-autonomous city-states (*altepetl*). The imperial core, essentially the Basin of Mexico, was territorially divided into 30–50 of these political entities. Each city-state featured a legitimate ruling dynasty, an accepted founding legend, control over local lands and labour, and a patron deity with its temple and dedicated ceremonies. Some *altepetl* also exhibited a predominant ethnicity and/or specialized occupation. Each city-state enjoyed some sense of autonomy, even if it had been conquered by a more powerful city-state (Berdan 2014: 135–36).

The focus of each city-state was a concentrated settlement, in most cases sufficiently large and complex to be considered an urban center. The Mexica city of Tenochtitlan was disproportionately large with an estimated 200,000–250,000 residents. The next largest cities in the Basin of Mexico were Texcoco (25,000) and Huexotla (23,000), followed by those in the Basin that ranged from an estimated 12,500–13,500 residents (Smith 2008: 152). While sometimes small in residential population, these cities were nonetheless the hub of city-state life. Here was the ruler's palace and court, the patron deity's temple, other prominent religious structures, and the local marketplace. The larger cities were diversified and cosmopolitan, their multi-ethnic populations contributing to widespread connections as well as inter-regional and inter-ethnic knowledge and integration. Marketplaces in city-state capitals, some of them renowned for specialties such as slaves, cloth, ceramics, dogs, or turkeys, attracted merchants who passed through carrying and trading their exotic goods, at the same time spreading news from afar. Occasionally such a city might witness humble pilgrims on the move to a famous shrine, haughty imperial administrators traveling to a new assignment, or a military detachment off to war (which they would, grudgingly, have to feed). In all of these cases, people in city-states were exposed to individuals and groups from other parts of the known world. Their lives were neither boring nor isolated.

With so many city-states crowding the landscape, the Aztec world was politically fragmented and highly competitive. Relationships among these polities were established along several dimensions. Friendly relations included royal invitations to lavish feasts and banquets, political alliances often involving joint military ventures, and marketplace interactions enjoyed by virtually everyone. Hostile interactions included warfare and conquest (and threats of conquest), resulting in asymmetrical relations among city-states. Some of these asymmetrical relations developed into regional conquest states and, during the last century of pre-Spanish times, the emergence and expansion of the Aztec empire. So while politically separate and relatively autonomous, city-states were not insular. City-state centres were visited by merchants from afar, conquering warriors looted distant centres, feared ambassadors and despised tribute collectors came and went through conquered lands, and clothing and adornment styles were adopted widely, especially by nobles throughout the broad Aztec world. Goods, information, ideas, styles, and people moved about widely.

Migrations and population movements

The Aztec (and pre-Aztec) world was a world in motion. While city-states were well-established political and territorial entities, people did move around in large and small numbers, and over long and short distances. City-states tended to be multi-ethnic, suggesting interesting settlement histories. The Mexica themselves were migrants into the Basin of Mexico, having followed many other similar groups (collectively called Chichimeca) from 'the north'; these migrations had been going on for centuries. These groups established new city-states or were assimilated into the many existing settlements around the Basin's lake. Other Chichimeca migrants found new homelands in valleys to the east and west of the Basin of Mexico.

Several environmental, political, and economic factors stimulated population movements in the last century before the Spanish arrival. First, environmental stresses and disasters led to population displacements. An extreme example is the four-year famine that occurred in the mid-fifteenth century in highland central Mexico (hitting the Basin of Mexico especially hard). People became so desperate that they sold their own family members to people in more prosperous areas, especially the Gulf Coast, in exchange for life-sustaining maize. While some of these dislodged individuals eventually returned to their homes, many did not, preferring to stay in their new homelands (Durán 1994: 238–41).

Second, political events led to voluntary population movements or involuntary displacements. For instance, in the early sixteenth century the Tenochtitlan ruler Motecuhzoma Xocoyotzin allowed refugees from the eastern city of Huexotzinco (former bitter enemies) to take temporary asylum in his island city; while most Huexotzincas later returned home, many decided to stay permanently in Tenochtitlan (Durán 1994: 445–51). In a different scenario, wars were frequent and battlefield captives were trundled to the victorious city, in most cases to face ritual sacrifice. But in some cases captive women and children were considered part of the 'booty' and taken to live as slaves in the homes of their new overlords (Berdan and Anawalt 1992, vol. 3: f. 66r).

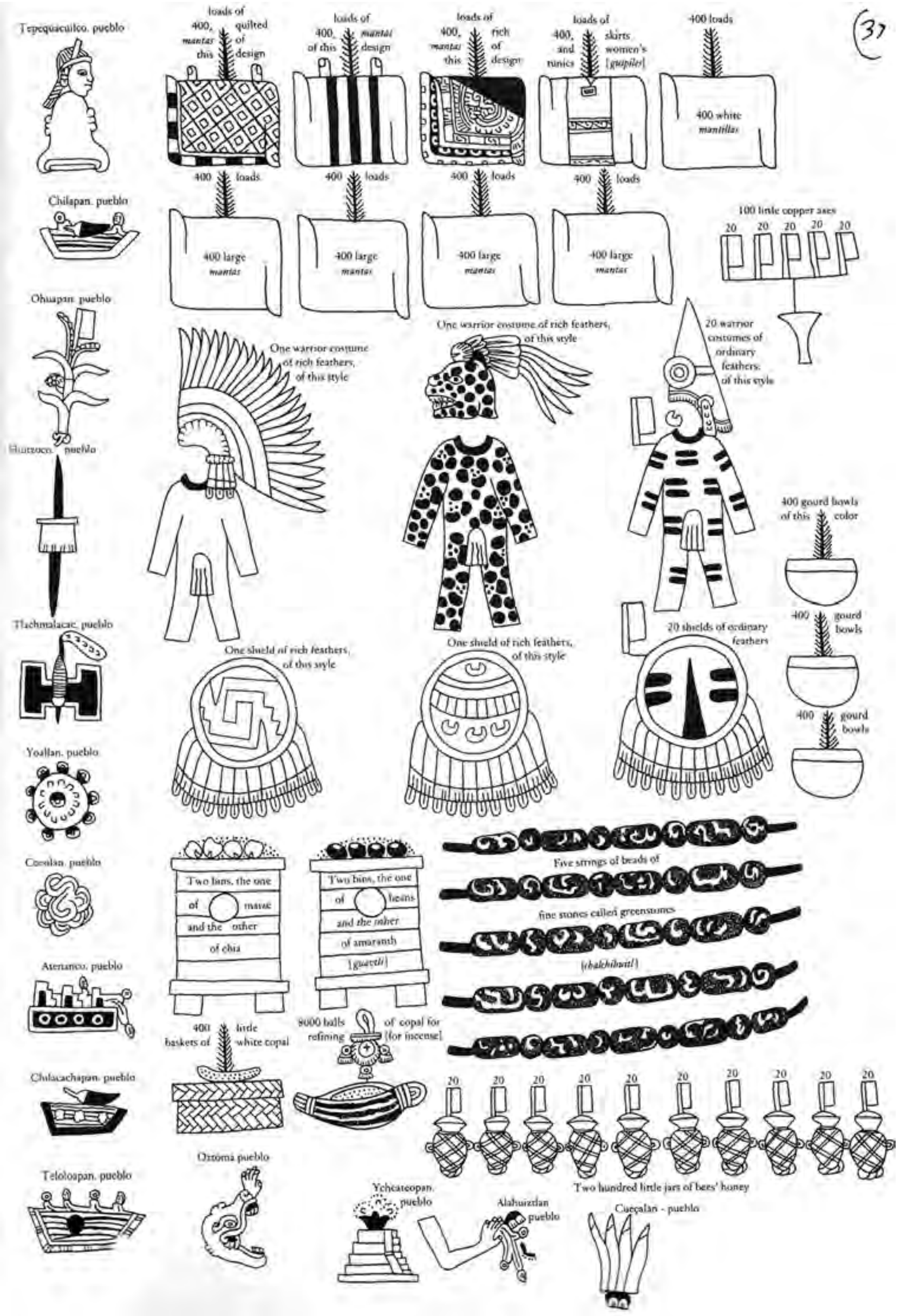
And third, at times economic opportunities led to resettlements of specialized groups, most notably skilled artisans. As one example, talented high-end artisans (with skills in metalwork, fine stonework, featherwork, and painting) were settled in the imperial city of Texcoco from distant regions, although we do not know if they arrived voluntarily or were brought there by political order. Another version of this involved the establishment of permanent enclaves of long-distance merchants in outlying regions.

In most of these cases, what appeared at first to be temporary solutions turned out to result in permanent population relocations in new lands and among new groups of people. Long term, these relocations required the establishment of creative local relations, whether the new arrivals remained relatively separate (in their own neighbourhoods) or became more fully assimilated into the larger group. In either case, the new groups brought with them their unique tool kits, behaviours, and ideas, resulting in some mutual borrowing. Exposure to novel ways of making, acting, and thinking encouraged greater uniformity while at the same time set apart those groups with visibly different customs. A prominent principle guiding these interactions was that of hierarchy.

The reinforcement of social hierarchy

In addition to its political fragmentation and potential for population mobility, Aztec society was intensely hierarchical. At the top, hereditary nobles enjoyed special privileges and perquisites based on their birthright and on their consequent control over lands and labour. Yet not all nobles were alike, and hierarchy was also well entrenched among those of noble standing. The vast majority of the population, commoners, lived in varying circumstances as producers of food and utilitarian goods, and as providers of services ranging from porters to barbers. In somewhat ambiguous intermediate positions were professional merchants (*pochteca*) and luxury artisans (*toltecca*), commoners by birth but atypical in their ability to accumulate vast amounts of portable wealth (especially the merchants). Slaves also existed in the Aztec social world; this was an undesirable status acquired through poverty, gambling, theft, or other impecunious deeds. It was primarily a matter of working off the 'debt', and was typically not inherited.

The degree of social mobility in this highly stratified system is a matter of some controversy. While distinctions between nobles and commoners were fundamentally based on birthright,



37
Tepequacuilco. pueblo
loads of 400, mantas this quilted of design
loads of 400, of this mantas design
loads of 400, mantas this rich of design
loads of 400, and tunics skirts women's [guapiles]
400 loads
400 white mantillas
400 loads
400 large mantas
400 loads
400 large mantas
400 loads
400 large mantas
400 loads
400 large mantas
Chilapan. pueblo
100 little copper axes
20
20
20
20
20
Ohuapan. pueblo
One warrior costume of rich feathers, of this style
One warrior costume of rich feathers, of this style
20 warrior costumes of ordinary feathers: of this style
Huitzoco. pueblo
400 gourd bowls of this color
Tlachmalacac. pueblo
One shield of rich feathers, of this style
One shield of rich feathers, of this style
20 shields of ordinary feathers
400 gourd bowls
400 gourd bowls
Yoallan. pueblo
Cocolan. pueblo
Two bins, the one of maize and the other of chia
Two bins, the one of beans and the other of amaranth [guautli]
Five strings of beads of fine stones called greenstones (chalchihuitl)
Atenanco. pueblo
400 little baskets of white copal
8000 balls of copal for refining [for incense]
Chilacachapan. pueblo
20
20
20
20
20
20
20
20
20
20
Two hundred little jars of bees' honey
Oztoma pueblo
Teloloapan. pueblo
Ychcateopan. pueblo
Alahuiztlan pueblo
Cueçalan - pueblo

Figure 3.6.2 The Aztec tributary province of Tepequacuilco. Tribute includes royal-style capes (upper left), prestigious feathered warrior costumes, jadeite beads, and a great deal of copal resin for incense

commoners reportedly could acquire quasi-noble status or unusual wealth through achievements on the battlefield, climbing the priestly hierarchy, or successful long-distance commercial ventures. These avenues appear to have changed over time and been more or less available depending on royal attitudes and policies. Notable are the relatively 'open' policies of the Mexica ruler Ahuitzotl (r. 1486–1502) compared with the distinctly 'closed' policies of his successor Motecuhzoma Xocoyotzin (r. 1502–1520). The former reinterpreted prior rulers' policies by actively promoting non-noble military men in his administration, while the latter overturned Ahuitzotl's approach and reinstituted hard-line class divisions. At the time of the Spanish conquest, then, nobles and commoners were sharply divided and social mobility, while not absent, was restricted.

Individuals and groups within this hierarchical social system participated in the Aztec globalized world in differing ways and to varying degrees, and it is worth a look at their varying roles as globalizing agents (Feinman this volume). Elites enjoyed broad contacts and associations, both geographically and ethnically: an 'elite culture' was shared by the upper crust over much of central Mexico. These aristocratic commonalities were established and solidified through 'marriage alliances, exchange of luxury goods, restricted cultural codes like writing and the calendar, and common participation in periodic rituals of solidarity and consumption' (Berdan and Smith 1996: 211). Importantly, elite social standing was visibly reinforced by the conspicuous display of exotic, precious, and ornate clothing and paraphernalia; materials for the manufacture of these objects (and some of the objects themselves) were obtained from areas far from the Aztec imperial core (Figure 3.6.2). There was a distinct imperial directionality and more-than-material content (Knappett this volume): the Aztec ruler Ahuitzotl (r. 1486–1502) appropriated symbolically laden warrior regalia from an important distant conquest, and even his royal cape was derived from outside his home city-state (Berdan 2014). In another vein, many high-level personages in imperially subject city-states became bi-lingual in Nahuatl, the language of their conquerors (Berdan *et al.* 1996). They undoubtedly recognized the practicality of this linguistic strategy. At the highest level, rulers of the numerous city-states faced enemies and forged alliances among themselves. These relations were highly volatile, and individual rulers followed strategies of arranging marriages and sponsoring feasts, banquets, and intimidating rituals to posture themselves favourably in this unsettled political landscape. While rulers and other nobles possessed the greatest ability to forge contacts far and wide, other groups and individuals also experienced exposure to people and regions well beyond their local borders. Warriors, potentially every able-bodied man, were exposed to other warriors on the battlefield and could not have missed noting (and sometimes coveting) enemy styles of martial regalia. Merchants, travelling across neighbouring regions and even farther afield to distant trading centres beyond imperial borders, were instrumental in moving goods and ideas widely about the known world. The lives of commoners were less impacted by the larger world, but many foreign, even exotic goods worked their way into the households of farmers, undoubtedly through central Mexico's extensive and vigorous market system.

A commercial economy

One of the strongest integrative forces in Mesoamerica during the final century before the Spanish conquest was commerce. Many different types of merchants populated central Mexico, from small-scale producer-vendors to regional merchants carrying bulk goods such as cotton and cacao, to long-distance professional merchants dealing in expensive exotics. All of these travelling entrepreneurs contributed to extensive economic integration in terms of both goods and ideas.

Professional traders with the most expansive influence were the *pochteca*, favoured merchants from at least 12 Basin of Mexico cities. Economically, they pursued their individual entrepreneurial goals by trekking to and from distant lands (often in large caravans) and trading in markets to their own advantage. They carried highland goods such as obsidian blades, gold and copper ornaments, rabbit fur, and cochineal to lowland trading centres, where they obtained luxuries such as shimmering feathers, prized jaguar pelts, and precious stones – all destined for elite consumers in their home and neighbouring cities. These merchants frequented the numerous marketplaces encountered in their journeys between the Basin of Mexico and distant 'international trading centres' (Gasco and Berdan 2003), buying cheap and selling dear, and not infrequently being accused of hard-boiled and even unfair dealings. The *pochteca* were not particularly popular in distant lands, partly due to these reputations, but also due to their political affiliations. The *pochteca* played important political roles for their own city-state rulers. Some of their travels led them to trading centres beyond the imperial borders, where they traded their rulers' goods for those provided by the foreign ruler. These transactions carried heavy diplomatic overtones, and as their rulers' representatives, the merchants were more political emissaries than economic entrepreneurs. *Pochteca* also served their rulers as spies: marketplaces were the hub of local and regional news and rumour, and merchants were expected to frequent them. These merchants would disguise themselves to obtain information on local resources, military strength, or plotted insurrections. In addition, *pochteca* activity in international trading centres extended the economic thrall of the Aztec domain beyond its imperial borders.

A vast network of marketplaces characterized the central Mexican landscape. While *pochteca* would occasionally pass through the larger regional marketplaces, the mainstay of these marketplaces were the local producer-sellers (of small lots) and regionally based merchants carrying bulk goods such as cotton and cacao from market to market and across neighbouring ecological zones. Marketplaces were critical to the integration of the Aztec domain – they provided predictable locales for the transfer of foods, raw materials, and finished goods from producer to consumer. They were also social hubs where one could catch up on the latest news of a nearby insurrection or the juicy gossip of an unexpected courtship.

Merchants and markets served both nobles and commoners, providing them access to life-sustaining provisions, utilitarian goods, luxuries, and socially meaningful clothing, adornments and regalia. With trade, borders became re-defined: while often closed politically they were nonetheless open to commerce. Materials and goods moved widely: highland goods such as obsidian tools and gold ornaments entered lowland daily life; lowland goods such as cacao and cotton became commonplace in highland settings. The result was widespread availability of materials and objects across regions and polities. And, as goods moved, so did more abstract domains of knowledge, ideas, and beliefs.

The integrative force of religion

Aztec-period Mesoamerican people, regardless of their cultural identities or city-state affiliations, shared a defined constellation of religious beliefs and practices. These included beliefs in a large and colourful pantheon of deities, construction of prominent temples and other places of worship, large retinues of priests (and fewer priestesses), and tightly scheduled ceremonies that were scripted, theatrical, and demanding. Human sacrifices were practiced throughout Mesoamerica. While this all sounds rather uniform, there were notable cultural and geographic variations; city-states were protected and guided by distinct patron deities, emphasized different ceremonies, and performed specific rites and presented offerings after their own cultural styles. In all of this, religion was also called upon to serve political agendas: patron deities figured prominently in the founding legends of city-states (thus legitimizing their dynasties) and large-scale human sacrifices were at times designed to intimidate friend and foe alike.

Aztec religion was assimilative rather than proselytizing. Imperial conquest did not result in the imposition of the Mexica patron god Huitzilopochtli on subject peoples. The Mexica were more prone to adopt the local patron deities they encountered in their conquests. 'Captured' deities were brought to the imperial capital of Tenochtitlan and housed in a special temple. A particularly popular adopted deity became incorporated into the conquering city-state's general pantheon and ceremonial schedule. This was nothing new, through time or across regions. Some deities originating in areas far from the Basin of Mexico were already popular there before the advent of the Triple Alliance. For instance, Xipe Totec hailed from the southern Pacific Coast and Tlazolteotl (an earth-mother goddess) most likely originated on the eastern Gulf Coast (Nicholson 1971: 420). These and other 'foreign' deities were firmly incorporated into the Mexica pantheon and ritual cycle by the time of the Spanish arrival. This propensity to adopt others' deities was not unique with the Aztecs, or, for that matter, with the religious domain. City-states throughout Mesoamerica were willing, even eager, to adopt novel cultural features, including more tangible things such as clothing and regalia styles, foods and their means of preparation, and tools. These general assimilative attitudes and practices contributed to an increasing cultural uniformity across regions in the Aztec known world.

It can therefore be argued that religion was another dimension along which connections were made in the Aztec world; religious beliefs and practices transcended polities and travelled across regions. It was a complicated dimension, entailing not just the adoption of a deity and its idol, but also all of the complex ritual scripts, material paraphernalia, specialized personnel (priests and caretakers) and their maintenance, and temple constructions required for the proper worship of that deity. One adopted not just a new god or goddess, but also all of its external expressions. In terms of its integrative impact, the adoption of foreign deities affected several layers of the accepting population, from the elite who would be trained as the deity's priests, to the lay servants who would serve and assist those priests, to the scribes who would incorporate this new realm of knowledge into the ritual books, to the luxury artisans who would fashion the deity's exquisite and unique adornments, to the masons and workmen who would construct the new temple. Across regions and cultures, the adoption of one another's religious complex stimulated a certain degree of standardization at that level (Jennings this volume; Knappett this volume).

Strategies of Aztec empire building

The Aztecs took advantage of their webs of political, social, commercial, and religious connections to build their extensive empire and extend its thrall beyond its borders into its broader known world. The Aztec empire was hegemonic, in general loosely structured. The imperial powers rarely dabbled in the affairs of their subjects as long as they paid their tribute on time and did not rebel. They interfered more in the politics of their Basin of Mexico subjects than with those farther afield, occasionally replacing a problematic local ruler with their own appointee. Other strategies of control were implemented in distant and potentially rebellious areas in the form of military garrisons and/or the imposition of imperial governors. Unpopular tribute collectors were established fixtures throughout the imperial domain. Despite the visible imperial presence, rebellions did crop up, especially during vulnerable moments in the empire's history such as the tenuous time gap between the death and election of imperial rulers, and the occasional (and sometimes spectacular) military defeats of Aztec armies (Berdan 2011). These incidents were never permanently debilitating to the empire, and rebellious or recalcitrant city-states were quickly returned to the imperial web, with more onerous tribute obligations as a punishment.

The Triple Alliance employed explicit imperialistic strategies in its 93-year expansion (Berdan *et al*. 1996). The most obvious strategy was the use of force and involved military conquest and consequent imposition of tribute payments. This 'economic strategy' brought 371 city-states into the imperial net; these polities, grouped into 38 provinces, regularly supplied their imperial overlords with vast amounts of food (e.g. maize, beans, chia, amaranth, chillies), clothing, utilitarian goods such as reed mats and firewood, elaborate warriors' costumes and shields, and luxuries including exquisite featherwork, precious stone ornaments, and jaguar pelts (Berdan and Anawalt 1992). These conquered provinces contributed substantially to the economic mainstay of the imperial cities and the exaltation and extraordinary lifestyles of the ruling elite. The Aztecs also applied a 'frontier strategy' in certain politically strategic areas. This was a more diplomatic approach that resembled alliances, although both parties recognized the asymmetrical nature of the relationship. It was a relatively inexpensive option to outright conquest: city-states (resembling Roman client states) poised astride enemy borderlands, located close to critical resources, and positioned along major transport arteries were called into imperial service in exchange for gifts and other support from the empire.

Aztec military conquest wrapped increasingly large numbers of people into the imperial web, exposing individuals of every social level to the world beyond their local borders. Nobles and commoners alike were affected by imperial wars and conquests; conquered peoples (again, nobles and commoners) produced additional goods for tribute payments while the conquerors, as tribute recipients, enjoyed enhanced lifestyles and economic security. Client states were inherently unstable, located in politically uncertain or potentially contested areas. Their relations with the imperial rulers were situational – unpredictable and unscheduled – although they were strategically located and could employ their own manipulative strategies in the middle of vying superpowers. Beyond expansionistic strategies designed to exploit economic resources of distant areas and inexpensively maintain hostile borderlands and critical transport routes, the empire also benefited from and supported the several widespread connections already discussed: elite commonalities and relations, small and large population movements, vigorous merchant and market activities, and religious assimilations. A new era of challenges began in 1521.

Spanish colonial Mexico, 1521–1570

With the fall of Tenochtitlan to Spanish forces in August 1521, a new empire extended its domination over the land and its people. Prior to Spanish arrival, there were few surprises in the history of Aztec empire building despite the Triple Alliance's expansion over widespread lands and culturally diverse peoples. They knew their foes and their foes knew them. They all shared rules of engagement. At the highest levels they shared spouses, gifts, and ceremonies. Yet they did not hesitate to engage these same peoples in warfare and exploit them after a successful conquest.

In some ways, the newly arrived Spaniards resembled their native adversaries and allies. Similarities can be seen in general approaches to imperial expansion and culture contact, but differences are glaringly obvious in the specifics of heritage, economic priorities, administrative organization, technology, religion, language, and lifestyles. The Spaniards drew on a deep European heritage flavoured by several centuries of Muslim occupation. They were accustomed to military lives and culture contact, having assimilated aspects of Muslim language and customs over the centuries prior to their involvement with the Americas. They also had garnered a good amount of expansionist and imperial experience, having re-taken control of Spanish Iberia from the Muslim occupants in 1492, pacified the Canary Islands in 1495, and established administrative and economic institutions in several Caribbean islands for some 25 years before setting foot in mainland Mexico. These experiments in colonial administration paid dividends to Spain after it gained military and political control of the vast area of the Aztec empire and neighbouring regions. Spain was already competitive in Europe with other strong nation-states; this fortune of discovery and conquest provided Spain with additional leverage in a European world on the verge of worldwide expansion and integration. We might look at Spain as a globalizing entrepreneur: how did this expansionistic experience unfold during the first half century of colonial rule in Mexico? More specifically, what changes occurred in the old Aztec world order now under Spanish dominion?

Some themes in Spanish imperial globalization in Mexico (New Spain)

From a globalization perspective, the arrival of Spain in Mexico set into motion new and increasingly complex connections and interrelationships: peoples formerly unknown to one another forged obligatory and voluntary ties that variously called forth acquiescence, accommodation, cooperation, conformity, creativity, resistance, and often the need to revise generally understood decision-making paradigms. These relationships also resulted in demographic trauma (especially for the indigenous population), the integration of culturally and linguistically diverse groups under the new regime, the adoption or accommodation of one another's styles and worldviews, and a rather shocking awareness of the existence and enormity of each party's known worlds.

Certain essential principles of political, social, economic, and religious organization in operation under Aztec hegemony continued under Spanish rule. Nonetheless, from the point of view of the indigenous subjects, contact with the Spaniards involved the appearance of novel material things, institutions, and ideas that sometimes harmonized and sometimes clashed with their traditional way of life. From the Spanish point of view, the incorporation of this rich domain into their developing empire presented challenges of political and economic administration (at the highest levels), social integration and local economic dynamics (largely concerning the colonists), and spiritual and educational control (by the religious arm of colonial rule).

Continuities and changes in political organization: building on the indigenous city-states

Spanish government in New Spain (most of the old Aztec empire) rested in the hands of a hierarchy of resident colonial officials from the Viceroy (the King's highest-ranking representative), a royal audiencia (high court), fiscal and treasury officials, and various lower-ranking bureaucrats. In theory, the ultimate fate of the native peoples rested with a king residing in a remote and unfathomable land; in reality, unpredictable communications between Spain and New Spain resulted in a considerable amount of vice-regal discretion and power. In a practical sense, the native inhabitants appealed to, and were answerable to, the colonial administration. This applies directly to the fate of city-states, their capital cities, and their traditional rulers (*tlatoque*).

The prominent city-state (*altepetl*) organization of central Mexico at the time of the Spanish arrival provided a convenient building block for Spanish colonial administration. These political entities served as focal points for the definition of colonial communities, *encomiendas*, and parishes. In pre-Spanish times, relations among city-states were unstable and volatile. Now, with new lords of the land, new opportunities arose for competitive city-states to gain political and economic advantages (usually at the expense of other city-states).

City-state capital cities became newly defined under Spanish governance: city-states with *tlatoque* traditions were typically awarded status as *cabeceras* ('head towns'). These privileged towns (including the prior Triple Alliance capitals) claimed surrounding *sujetos*, or subject, tribute-paying towns. As might be expected, indigenous communities diligently sought the status of *cabecera*, even if they lacked traditional rulers. Appeals to the new lords of the land afforded communities new opportunities for political advancement and economic gain. The Spanish style of governance provided accessible means of litigation: 'The Spanish courts overflowed with jurisdictional disputes as each community sought to preserve or elevate its position under Spanish rule' (Berdan 2005: 192). Over time, the *tlatoani* criterion lapsed, being replaced by criteria of antiquity, location, size, and the presence of notable markets or Christian churches (Gibson 1964: 54).

Traditional rulerships, while initially respected by the Spaniards, gradually became eroded during the sixteenth century, and rulers' domains and powers became re-defined within the confines of the colonial administration. For instance, a daughter of Motecuhzoma was awarded Tlacopan as an *encomienda* (most certainly a shock to this former Triple Alliance imperial partner). Other legitimate heirs of this Mexica ruler were also awarded *encomiendas* (grants of native labour to privileged indigenous nobles, but more usually to Spaniards); this practice disengaged these individuals from their former statuses and transformed them into *encomenderos* in the Spanish mold.

Similarly, local rulers also began to lose their political footings as Spanish-style governors and *cabildos*, or town councils (albeit with native participants) became instituted throughout New Spain. In this evolving scenario, a *tlatoani* often initially served as his town's governor, but over time this office frequently became vested in another indigenous person altogether, undermining the traditional ruler's claim to community control. In addition, towns with *cabecera* status were overseen by a Spanish official or *corregidor* who meddled as much as possible in native community affairs – attending council meetings and working to sway opinions.

As the sixteenth century moved along, native community political organization became more and more impacted by Spanish rule: council members were elected (with the results approved or disapproved by the Viceroy), some Spanish officials exercised powers beyond their due, the Spanish administration recognized governor/*cabildo* authority over the *tlatoani*, and town officials were paid salaries, often in Spanish money. In short, a town's elected officials were now responsible to the Spanish colonial government; their traditional ruler or his heirs may still reside in the community, but with severely diminished powers. Although the basic political-territorial unit was still based on the traditional city-state, by mid-sixteenth century it was becoming administratively transformed into a Spanish-style community. Indigenous leaders were becoming drawn into the Spanish world and its demands, resulting in increasing cultural and social homogeneity.

Population dynamics under the new regime

The first half-century of Spanish occupation in Mexico was a demographic disaster for the indigenous people. Warfare and overwork under unfamiliar labour conditions imposed by Spaniards led to considerable loss of life. But the greatest debilitator of the indigenous population was epidemic disease, especially smallpox, measles, influenza, and perhaps typhus, to which the native people had no immunities. Epidemic disease swept Tenochtitlan even before it fell to Cortés: the Mexica ruler Cuitlahuac died in 1520 of smallpox, and famine accompanied the disease, contributing to additional loss of life. This scenario was repeated in the ensuing years throughout Mexico (indeed, throughout the Americas); it is estimated that by 1570 the indigenous population of Mexico had declined by one-half to two-thirds of its pre-Spanish numbers. Millions died. Lowland regions were hit especially hard, with some entire communities erased from the map.

The repercussions of this demographic collapse were immense. Beyond the personal and emotional losses, these conditions also impacted New Spain's political, social, and economic life. Especially significant was the dislocation of native people from their traditional settlements: some migrated from famine, others from disintegration of their communities due to extreme loss of life, others from forced relocations called *congregaciones*. These movements, from whatever cause, created sticky issues for host communities: for instance, in 1547 Tlaxcalla's town council was faced with the problem of controlling and taxing its many native newcomers from other cities, including Mexico City and Texcoco (Anderson *et al*. 1976: 121). *Congregaciones* were uniformly unpopular among the native inhabitants, and required creative accommodations on the part of both migrants and host communities; the newcomers were variously integrated into the new communities or settled in their own residential districts.

In New Spain, Spanish immigrants had grown to approximately 150,000 by the first half of the sixteenth century. They preferred city living, drawn to Mexico City (built atop Tenochtitlan) and creating their own new cities such as Veracruz and Puebla. Few were farmers or labourers, although we do hear of some Spaniards in these occupations. An example is the Spaniard who was hired by the indigenous town council of Tlaxcalla to manage their flocks of sheep; renewal of his contract was dependent on his ability to increase the flocks (Lockhart *et al*. 1986). In general, the Spaniards lived separately from the native people, whether in cities or on estates.

Expanded connections among diverse peoples, increased migration, and the creation of diasporas are outcomes of globalization (Feinman this volume). The dramatic demographic dynamics in early New Spain were instrumental in expediting globalization on that stage.

The social hierarchy: additions and adjustments

The Aztec social system was complex and hierarchical. So too was the Spanish social order. In the first 50 years following the conquest, the Spaniards added more levels to the already complex indigenous social hierarchy. Spaniards born in Spain (*peninsulares*) were awarded the highest colonial offices, with Spaniards born in the colonies (*criollos*) occupying lesser bureaucratic positions. This arrangement allowed the Spanish crown some measure of control where long distances and dangerous transport resulted in unreliable communications between Spain and its colonies. Other colonists were more humble settlers searching for improved livings in New Spain.

Early on, surviving indigenous nobles retained some traditional perquisites and titles, although these rights became more and more limited and constricted. It became customary for nobles to secure special rights granted by the Spanish regime, a process that progressively integrated them into Spanish institutions and culture. We have already seen that native elites became governors and *encomenderos*, both Spanish-instituted positions. Some were allowed to 'carry swords or firearms, to wear Spanish clothing, to ride horses or mules with saddles and bridles . . .' (Gibson 1965: 155). They came to appear more and more like Spaniards, adopting Spanish goods and ideas, and depending on Spanish gratuity for the maintenance of their elevated status. Accompanying this, most of the traditional trappings of nobility were eroding, as was the weakening of heredity as a criterion for elevated position and rule. Some native nobles were economically stressed, even to the point of being tempted to sell their landed properties.

Native commoners were not entirely powerless under Aztec rule, and were known to seize opportunities for their own advantage when they arose. Now, the presence of new lords of the land opened occasional avenues for advancement for commoners. A good example comes from

Tlaxcalla, where commoners recognized the commercial value of cochineal on the Spanish market and began to concentrate on its production. The local nobles took exception to these entrepreneurial actions by the commoners and tried to restrict their production activities. Nonetheless, as they gained in wealth, these enterprising commoners also acquired some noble-type attitudes, even to pouring watered-down cacao on the ground as not worthy (Lockhart *et al.* 1986: 82).

Most early Spanish colonists were men. Many of these men sought indigenous wives or mistresses, resulting in the creation of a new population of *mestizos*, or individuals of mixed blood and heritage. Most early *mestizos* were of ambiguous social status; those raised by their mothers were often culturally indistinguishable from other native persons. More rarely, *mestizo* children of wealthy and noble parentage (father and mother) acquired the trappings of Spanish culture. Adding to the mix were African slaves, comparatively fewer than on the Caribbean islands. Children of mixed African and Spanish descent emerged, and as *mulattos* their status was also ambiguous and guided by personal circumstances. After several generations the population of New Spain became predominately mixed, and while those mixings were highly individual and variable, and specific native identities did persist, the population as a whole became more culturally blended and homogeneous.

While the Spaniards added complexity to the colonial social order, demographic, economic, and social processes progressively moved all of this toward greater homogeneity. In Tlaxcalla in the 1550s, nobles complained that 'Perhaps those who are in the lordly houses will become ordinary commoners, and the commoners who are buying the fields will be noblemen' (Lockhart *et al.* 1986: 85). Prophetic words. Such homogenization is an important outcome of globalization, but so also is the creation of new forms of diversity (Jennings this volume). This latter process is seen here in the development of new mixed populations (e.g. *mestizos*) and the compression of statuses of indigenous nobles and commoners during the first half-century following conquest.

Expanding the commercial economy

The Aztec economy was a commercial one, with lively markets, exuberant merchants, and eager consumers. Spanish commerce was also highly developed, and provided new, expanded outlets for native production activities and commercial enterprises. For both parties, novel materials, goods, and technologies appeared and became incorporated into a merged economy serving both local/regional needs and long-distance, transatlantic goals. Spanish economic priorities, fuelled by a desire for gold and other forms of European-defined wealth, led to an exploitative colonial economy focusing on extraction of metals, high-value materials such as cochineal dyes, and development of large agricultural enterprises and plantations. Native economic priorities became multi-faceted in their newly expanded economic world – indigenous individuals continued as household and market producers, but some also entered the Spanish technological and commercial world: they produced cochineal dyes for a hungry European market, they served as muleteers in a transformed transport system, they tailored Spanish-style trousers, shirts, and blouses. Among globalization processes, homogenization is prominent again here, through the adoption of one another's materials and styles, and increased intensity of interconnections. A new, multi-faceted economy was in motion.

The Spaniards brought with them many novelties: livestock and draft animals, chickens, wheat and other grains, grapes, sugar cane, the wheel (for transport, spinning, and pottery-making), metal tools, and distillation (yielding tequila from the native maguey plant). For their part, the native peoples introduced the Spaniards to enticingly desirable products such as maize, tomatoes and other fruits and vegetables, tobacco, turkeys, vanilla, chocolate, and dyes. The Spaniards may have manufactured fine silver cups, but the Aztecs were experts at fashioning exquisite objects of featherwork. In this latter case, it was the Spaniards who appropriated the native craft, employing master featherworkers to produce intricate mosaics on Spanish-style objects (such as triptychs) with Christian themes – a good employment for the native featherworkers who no longer found consumers for the pre-conquest feather shields, banners, and warrior costumes.

Many materials and technologies brought from Spain were readily acquired and cleverly adapted by native artisans and consumers. Indeed, Spanish artisans faced stiff competition from native craftspersons who quickly learned many new trades and became adept tailors, saddlers, blacksmiths, shoemakers, and manufacturers of Spanish-style musical instruments and tooled leather. Native peoples were also at times accommodating and receptive as consumers. Spanish-style clothing was quickly found on indigenous persons; men might cover Spanish shirts and trousers with a native-style cape (the more modest Spanish clothing more to the liking of the Christian friars). Introduced candles were an instant hit as an additional use for native beeswax. Steel machetes became a necessity, and chickens were quickly adopted. Some native economic activities continued side-by-side with introduced ones: women continued to weave on backstrap looms, while Spanish treadle looms, operated by men, thumped in nearby *obrajes*. The adoptions and meshings are legion. Take the will of one mid-sixteenth century indigenous man, for example, who bequeathed to his heirs gourd bowls, baskets, and a digging stick along with an axe, scissors, a lock, leather shoes, and white boots (Cline and León-Portilla 1984: 41–43).

Introducing a new religion and world view

I argued earlier that religion provided important connectivities in the Aztec world. It was especially important in the Spanish colonial world. The religion brought by the Spaniards was a monotheistic and proselytizing one that had little room for the polytheistic and assimilative religion of the native subjects. On the other hand, the indigenous people had little difficulty folding the Christian god into their pantheon, albeit with pride of place, since this was the god of the conquerors. In this process, the native deities were not abandoned, just augmented. Furthering a monotheistic religion, this was not what the friars and priests intended.

The indigenous religion was faced with grave challenges with the arrival of the Christian god. With public worship of their traditional deities prohibited, native individuals either overtly converted (although rarely totally abandoning their traditional beliefs), or concealed their ancient rituals, continuing to worship hidden images and sacred bundles and to support native practitioners (Tavárez 2011). Most commonly, a form of syncretism developed whereby the Christian god, religious themes, and ceremonies were meshed with native deities, beliefs, and rituals. Native deities became interwoven with Christian counterparts: this resulted in blendings such as the Virgin Mary with the Aztec mother goddess Tonantzin, Jesus Christ with Tonatiuh (the sun), Saint John the Baptist with Tlaloc (both with water associations), and Saint Anne (Jesus's grandmother) with Toci ('Our Grandmother'). Beliefs and rituals frequently became similarly enmeshed. Although in this brief rendition all of this sounds fairly smooth, it rarely was, and considerable confusion and misunderstandings emerged along the way (Lockhart 1992). Nonetheless, these processes generally developed as acceptable accommodations in New Spain, albeit generating a form of Christianity not immediately recognized in Spain. In globalization terms, a new form of diversity was created – in this case, one that facilitated linkages and communications between potentially conflicting parties.

Globalization processes in ancient and colonial Mexico

While not global in scope, the processes that generated and sustained Aztec and Spanish imperial aspirations fit squarely within the framework of globalization. Their respective experiences in Mexico reveal increasing (and increasingly complex) interconnections during imperial expansion resulting in the redefinition of borders, increased migrations and population movements, the creation of diasporas, and the mutual (and often re-cast) adoption of materials and ideas. In general, these interactions yielded greater homogeneity in cultural, economic, political, social, and religious realms. Still, much of this homogeneity was superficial, and cultural diversity was not lost in the face of these powerful forces. Much cultural and ethnic identity was tenaciously retained by subject peoples (whether under Aztec or Spanish hegemony), and new forms of diversity emerged in the face of contact, whether in the Aztec or early Spanish colonial worlds.

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3.7

Globalization and the early modern Atlantic World, c.1500–1700 CE

Charles E. Orser, Jr

Introduction: the dialectics of globalization and early modern archaeology

Early modern archaeology investigates the globalization process during the sixteenth and seventeenth centuries. Archaeological research, through its multidisciplinary method of linking excavation with historical research – in addition to its overt interest in the material conditions of daily life – is especially well suited to investigate the earliest manifestations of modern globalization. One advantage of archaeological research is that analysis can be conducted on numerous scales at once (see Orser 2009, 2010: 116–20). On the micro level, people engage in face-to-face relationships based on personal decisions, societal and legal regulations, and the overarching programmes established and mandated on the macro level (Castells 2009: xxxvi). Excavation exposes the micro-scale on the site level, and when the scale is broadened beyond the site, archaeologists can obtain unique insights into the macro-scale connectivities that compose an entire system of interaction (e.g. Feinman this volume, Knappett this volume).

The Atlantic World is amenable to the study of globalization because European nations were deeply concerned with controlling and exploiting the region. Their interest in the coastal fringes of the Atlantic – including North, Central and South America, the islands of the Caribbean, and western and central Africa – began in earnest in the sixteenth century. The network of outposts built by the various European polities were linked together mostly through the sea during the early modern era. The European institution of the capitalist enterprise was inexorably connected with their colonial ventures, and the 'inclusion of the New World in the international economy ranks among the important events in modern history' (Solow 1991: 1). Scholars have used various names to identify what the Europeans constructed in the Atlantic World, usually with the assistance of indigenous and enslaved peoples. The term 'Atlantic System' usefully conveys the situation during the early modern era, with the understanding that the system had diverse, multivariate subsystems.

Accepting that globalization is a complex process with diverse historical and cultural expressions, sociologist George Ritzer (2003a, 2003b, 2007a; Ritzer and Ryan 2002) has constructed a useful model with direct relevance to the archaeology of early modern world globalization. For Ritzer, globalization results from the dialectical relation between glocalization and grobalization.

Most contemporary analysts have accepted glocalization as a significant element of globalization but have overlooked the process that opposes it. Scholars have generally perceived glocalization as the autochthonous counterforce acting against globalization, but have often ignored the impacts of alien grobalization. The rise of capitalist-driven enterprises just when Europeans were entering the Atlantic World necessitates the inclusion of grobalization in a full exploration of globalization. Capitalist practice did not begin its climb to full global reach until the late eighteenth century, but its modern manifestations were clearly formulated during the Europeans' so-called 'Age of Exploration'.

Glocalization, the more familiar of globalization's two processes, is 'the interpenetration of the global and the local resulting in unique outcomes in different geographic areas' (Ritzer 2003b: 192). Anthropologists, sociologists and historians have been adept at identifying and documenting this process at diverse places around the world (e.g. Berger and Huntington 2002; Edelman and Haugerud 2005; Featherstone 1990; Inda and Rosaldo 2007). They have repeatedly demonstrated that even today's fiercest efforts to impose full-scale globalization are never completely successful in overwhelming and replacing the traditions, outlooks and customs of indigenous peoples (e.g. Caldwell 2004; Watson 1997). Glocalization theorists view individuals and social groups as creative agents capable of shaping their own lives, identities and histories (see Robertson 2001). Local interaction with alien people, products and ideas means that the indigenous responses have infinite variety as different cultures find their own ways to contextualize the new and unfamiliar.

Anthropologists and archaeologists often perceive autochthonous response – termed creolization, heterogenization or hybridization – as a positive adaptation to the introduction of foreign artefacts, methods, perceptions and practices (e.g. Dawdy 2000). In the process of cultural incorporation, indigenous peoples contextualize new objects in ways the objects' producers or sellers may never have imagined.

In Ritzer's model, a concentration on glocalization, however important, permits only a partial understanding of globalization. The dialectical process of grobalization also must be considered. This process refers to 'the imperialistic ambitions of nations, corporations, organizations, and the like, and their desire and need to impose themselves on various geographic areas' (Ritzer 2003b: 192). The term's linguistic root refers to the need of capitalist ventures to grow to be successful, in what Marx ([1887] 1967: 612–28) identified as 'The General Law of Capitalist Accumulation'. Scholars have identified the most recent forms of grobalization as McDonaldization, Disneyization or Disneyfication, Westernization and Americanization (e.g. Bryman 2003; Esmer 2006; Kapferer 2003; Ritzer 2007b; Ritzer and Ryan 2002: 68–70).

A central idea of grobalization is that corporate bodies overtly seek to expand their reach as far and wide as possible. In capitalism specifically, corporations hope to create consumerist lifestyles populated with their products and ideas (Mander and Goldsmith 1996: 295). Grobalization, which rests at the heart of capitalist practice, seeks homogeneity, even though it never really attains it (Bourdieu 1998: 38). Failure to overwhelm, however, does not lessen the capitalist urge to grow, nor does it reduce the power of the 'culture-ideology of consumerism' to create 'induced wants' (Sklair 2002: 166).

Grobalization, though perhaps easiest to conceptualize in today's capitalism, is not necessarily economic because it carries with it 'the imperialistic ambitions of nations, corporations, organizations, and other entities and their desire – indeed, their need – to impose themselves on various geographical areas' (Ritzer 2003a: 194). As a result, in grobalization corporate entities seek to shape the attitudes, beliefs and outlooks of the receiving culture with the hope of transforming it. The hoped-for outcome, as far as the grobalizers are concerned, is homogenization between it (the grobalizing alien culture) and those peoples with whom they are in contact (the glocalizing indigenous culture). Important to archaeological research is the idea that grobalizers see tangible objects as a key force for cultural change. As a feature of the globalizing world, grobalizers perceive material things as key determinants of self and group identity (Ritzer and Ryan 2002: 60).

Glocalization and grobalization are two features of the globalization process. The dialectical contest inherent in globalization has intertwined cultural, economic, political and institutional components (Ritzer and Ryan 2002: 57–58). Both are necessary for understanding capitalism's institution, development and rise as a world-encompassing economy. I leave it to others with more knowledge of deep history to demonstrate the historical longevity of grobalizing impulses, but Ritzer's dialectical model is clearly relevant to the study of early modern European globalization.

Early modern globalization, Europe and the Atlantic

The Columbian voyages beginning in 1492 created Europe's obsession with the Atlantic World. Portugal had begun to investigate Africa in 1415, but they did not find the north-east coast of Brazil until 1500. During the 1500–1700 era, influential individuals and groups in Portugal, Spain, England, France and the Netherlands were interested in North and South America, including the Caribbean. Through various intermediaries and agents, each nation maintained its own 'Atlantic System'.

In the New World, by the beginning of the sixteenth century, the Spanish had staked a claim to the southern part of North America, all of Central America, and much of South America. They also had considerable outposts in the Caribbean, notably in Havana and Santo Domingo. The Treaty of Tordesillas in 1494 gave the easternmost point of Brazil to the Portuguese, so Spanish Jesuits established a series of missions in today's southern Brazil just west of the line (Elliott 2006: 124). For their part, the Portuguese constructed a series of sugar plantations and a few towns, such as Bahia (1549), along the coast of north-eastern Brazil. Between 1630 and 1654, the Dutch challenged the Portuguese's right to this region and wrestled Bahia away from them in 1624. The French also sought land in South America and created a colony in the Bay of Rio de Janeiro in 1555. The Portuguese, who viewed Brazil as theirs, captured the colony in 1565–1567.

The English were also fascinated by South America, and, being Protestant, they disputed the legality of the Treaty of Todesillas. In 1595, Walter Raleigh voyaged to Guiana on the north-easternmost coast of South America in search of El Dorado, the famed golden man (Schomburgk [1848] 2010). Three years later, English explorers visited the Amazon, and in the early seventeenth century built a series of outposts and plantations in alliance with groups from Ireland and the Netherlands (Williamson 1923). They also constructed short-lived settlements on small Caribbean islands as outposts of Puritanism (Kupperman 1993; Newton 1914). The English had also established colonies on the eastern coast of North America, as they began to perceive the Atlantic as 'a European lake' (Elliott 2006: 114).

In Brazil in 1616, the Portuguese captured the region around the mouth of the Tocantins River from the French. The Portuguese established Belém and used this town as a base from which to harass and attack English and Dutch forts and settlements in the Amazon basin. The region remained contested for the next few decades until the Portuguese firmly established their control of the region (Lorimer 1989). At the same time, all of the major superpowers in addition to Spain developed colonies in the Caribbean.

A significant portion of the globalization process in the European Atlantic World involved the importation of enslaved African captives (Heywood and Thornton 2007). Slavery was an ancient feature of human history, and extensive transportation systems moved enslaved individuals around the Mediterranean, central and western Europe, sub-Saharan Africa, and elsewhere for generations (Phillips 1985). In every case, the enslavement and transportation of individuals from widely diverse regions of the world connected diverse peoples together in webs of interaction, often creating multicultural environments. The transatlantic slave trade existing between 1501 and 1867 was 'the largest transoceanic forced migration in history' (Etlis and Richardson 2008: 1).

The precise number of individuals transported in the slave trade is a matter of debate. The best currently available estimates demonstrate both the inter-European conflict over territory and the changing fortunes of empire throughout the early modern era (Table 3.7.1). Viewing the statistics in 50-year segments reveals that Spanish America received the majority of enslaved Africans in 1551–1650. The islands of the Caribbean did not become major importers of enslaved individuals until the following 50 years. These statistics, though not infallible, attest to the primacy of the Spanish Empire in the New World from about 1550 to 1650. By the middle of the sixteenth century, the flow of riches from Spanish America to Spain had greatly diminished (Kupperman 1988: 91). From 1649 to 1663, partly under the aegis of Oliver Cromwell's Western Design, England began to work toward establishing major colonial settlements in the Caribbean. They constructed a strong navy, created a Council for Trade and Plantations, and passed the Navigation Acts of 1651, 1660 and 1663 (Elliott 2006: 113). Their goal was to wrest as much territory from Spain as possible, and after being repulsed at Hispaniola, the English set sail for Jamaica and easily overpowered the small Spanish force there (Delle 2014: 35–36).

Early modern international commerce was characterized by Europe's importation of spices, tea, silk, porcelain and perfumes from Asia, and sugar, silver, gold, hides and tobacco from the New World. Intense international competition and conflict occurred as each nation attempted to acquire territory and riches at the expense of the others. With wealth came international power, and increased wealth meant being able to create and maintain an ever-expanding web of commercial, cultural and political connections. Spatial expansion and insertion into increasing numbers of indigenous cultures was the essence of grobalization.

Chinese export porcelain was an important early modern product (see Pitts this volume; Sijpsteijn this volume; Ajmar this volume). Its discovery, context and meaning constitutes an avenue through which archaeologists of the early modern Atlantic World can observe the globalization process in action. Shards and vessels unearthed at colonial-period sites throughout the world, in addition to shipwrecks, provide tangible testimony to the presence of past global linkages created during the 1500–1700 era.

Table 3.7.1 Estimated number of captive Africans pressed into slavery, 1500–1700 CE

	1514–1550		*1551–1600*		*1601–1650*		*1651–1700*	
Location	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
Europe	624	17.2	266	0.3	120	0.05	5,019	0.9
North America	—	—	—	—	141	0.1	12,606	2.2
Caribbean	1,509	41.6	4,713	6.0	18,717	7.8	440,171	75.4
Spanish America	361	10.0	54,934	70.5	168,187	69.8	36,361	6.2
Brazil	—	—	1,319	1.7	41,465	17.2	86,443	14.8
Africa	—	—	236	0.3	240	0.1	1,469	0.3
Other	1,131	31.2	16,447	21.1	12,078	5.0	1,796	0.3
Total	3,625	100.0	77,915	99.9	240,948	100.1	583,865	100.1

Early modern globalization and Chinese export porcelain

Chinese craftspersons produced pots using wheel-thrown technology by the Han Dynasty (206 BCE–220 CE) (Hobson 1962: 11), and they made true porcelain at least by the mid-seventh century CE (Silcock 1939: 15). Before the mid-sixteenth century, the principal non-Chinese consumers of blue-and-white porcelain lived in the Islamic world. Muslims were so central to the trade in blue-and-white porcelain that the industry may not have developed without them (Mudge 1986: 17). As early as the Yuan Dynasty (1279–1368 CE), Islamic patrons had imposed their decorative aesthetics on Chinese potters, who were willing to decorate their export wares with verses from the Koran and other images with appeal to elite Muslim consumers (Fischell 1987: 77). Chinese potters imported the rich cobalt-oxide pigment called 'Mohammedan blue' from the Middle East (Hayashiya and Hasebe 1966: 82–83) and adopted underglaze painting, an Islamic technique probably first used in Damascus in the twelfth century CE (Mason 1995: 6).

Europeans first learned about porcelain in the East. The Portuguese, the first nation to send ships to China specifically to obtain porcelain (Wilcoxen 1999: 2), encountered the ware when they conquered Goa in the early sixteenth century (Brook 2008: 62–63). Dutch mariners encountered porcelain in India later in the century. Portugal had established direct contact with Beijing between 1517 and 1521, and their merchants had created the mechanics of the east–west trade in porcelain and other goods later adopted by their European rivals (Le Corbeiller and Frelinghuysen 2003: 7). The shipment of a small number of vessels decorated with the royal arms of King Manoel I of Portugal (1495–1521) marks the commencement of the blue-and-white porcelain trade between Asia and Europe (Carswell 1985: 32).

In response to the rising demand, the Ming Dynasty transformed the market town of Jingdezhen in Jiangxi province into a major porcelain-producing centre (Dillon 1992: 278). Local deposits of kaolin clay and feldspar, the two key ingredients needed to produce thin-bodied, hard-paste porcelain (Neave-Hill 1975: 115), allowed the potters of Jingdezhen to excel in porcelain manufacture (Hayashiya and Hasebe 1966: 78).

Chinese potters were adept at providing vessel forms and decorations appealing to European customers (see Gordon 1979), and Europeans, being eager to obtain porcelain of any sort, would accept inferior pieces. A ewer produced during the Zhengde era (1506–1521) – at the time of earliest Portuguese contact – has the shape preferred by Muslims but exhibits the Portuguese coat of arms, albeit painted upside down (see Le Corbeiller and Frelinghuysen 2003: 6). This vessel's acceptance in Portugal provides testament to the dialectics of globalization: the willingness of Chinese potters to use decorations they did not understand but which were desirable outside China (grobalization, expanding the market), and the eagerness of Europeans to accept Chinese-made porcelain despite easily recognizable flaws (glocalization, recontextualizing alien cultural elements). As had happened earlier in the Ottoman Empire (Carroll 1999), elite consumers of porcelain used the scarce and exotic wares as symbolic markers of their class position. Ownership was more important than the accuracy of decoration.

In 1598, Dutch speculators from five trading companies sent ships to Indonesia. When one arrived back in Amsterdam a year later heavily laden with exotic cargo, the people of Amsterdam publicly rejoiced and the shareholders received a 100 per cent return on their investment (Boxer 1973: 25). This success led to the union of the competing companies into the Dutch East India Company (VOC, *Verenigde Oostindische Compagnie*) in 1602 (see also Pitts this volume). In 1621 the Dutch created the Dutch West India Company (WIC, *Geoctroyeerde Westindische Compagnie*). The English had already instituted their East India Company in 1600 (Scammell 1981: 477). Each company, regardless of national affiliation, sought to establish its own interlinked network of outposts stretching across their economic empires from Indonesia to South America. They pushed grobalization as far as possible within the constraints imposed and exercised by local polities. The movement of commodities such as porcelain was a central feature of many of these global webs.

The first large shipment of Chinese blue-and-white porcelain to enter the United Provinces came from a captured Portuguese ship in 1602 (Brook 2008: 63). The Dutch referred to this ceramic as *kraakporselein*, a word based on the type of Portuguese ship – the carrack – from which they were looted (Mudge 1986: 64). The term describes porcelain exported or acquired during the Wan-Li period, (1573–1619) or before Chinese export porcelain became an everyday European commodity (Wilcoxen 1992: 11). The so-called 'Wan-Li' design, consisting of blue pigment on a white background, is characterized by a 'panelled border of stylized chrysanthemums alternating with Chinese symbols; and a central motif of a bird on a rock surrounded by flowers' (Wilcoxen 1985: 123n).

Chinese potters willing to peddle what they considered to be inferior goods sold porcelain vessels by the hundreds of thousands to willing Europeans (Brook 2008: 68–69). Between 1602 and 1650, Europeans imported millions of vessels, with most of them going into the Dutch trade (Fischell 1987: 105). During the 1620–1680 period, Chinese potters continued to adopt grobalizing strategies by decreasing the quality of their export wares and replacing their traditional religious and folk motifs with designs having Western appeal (Mudge 1986: 64). They also decreased their output of ornamental objects for the Chinese market in favour of Western tablewares (Fischell 1987: 25–26). Shipwreck excavations reveal the huge number of Chinese porcelain objects intended for the European market (e.g. Jörg 1986; Ward 2001).

European potters were desperate to create their own porcelain, but they lacked the knowledge of the process or the ingredients. For many years, a dispute raged among them about the composition of Chinese porcelain. Many Europeans thought its fine, white appearance came from the addition of eggshells or fish bones to the clay. Others believed the quality of porcelain derived from burying the vessels in the ground for an unknown length of time (West 1977). These misconceptions occurred because Europeans, prohibited from visiting the Chinese interior during the Ming Dynasty, were unable to witness porcelain being made.

Potters in the Spanish New World, Portugal, and soon in the Netherlands and England decided to seek a share of the globalized market by attempting to imitate Chinese porcelain with tin-glazed earthenware (majolica/maiolica/faience/delft) (Mudge 1985: 43). Italian potters had mass-produced tin-glazed majolica with Middle Eastern and North African designs in the fifteenth century (Maser 1985: 37). European potters, particularly in the United Provinces (Barber 1906; Scavizzi 1970: 91), soon began their own attempts to replicate Chinese export wares, but with little success (Noël Hume 2001: 221). European potters also painted their tin-glazed ceramics with designs they presumed were copies of Chinese motifs, but they often missed the mark by a wide margin. Since the potters had no direct experience with China or the Chinese, their decorations were often caricatures of Chinese motifs that could not be mistaken as authentic. For example, some specimens with 'Wan-Li' designs were often only approximations (Figure 3.7.1). The vessels' attributes could reveal their inferiority when compared to Chinese porcelains. Chips along the edges could expose red or buff paste, the glazes were often uneven, and the 'Chinese' inscriptions in the middle of a plate were often nonsensical (Brook 2008: 117–19). As was true in the Ottoman Empire, European potters copied the concept of 'the Oriental' rather than the detail of Asian artwork (Carroll 1999: 181). Ersatz Chinese patterns were so popular in Europe that Dutch painters often included them in their still life studies (see Barnes and Rose 2002: 114–15). The European consumers' desire to obtain ceramic vessels decorated with 'Oriental' designs meant that European potters, in their grobalizing efforts, produced tin-glazed earthenware in increasing numbers (Wilcoxen 1987a: 57–71).

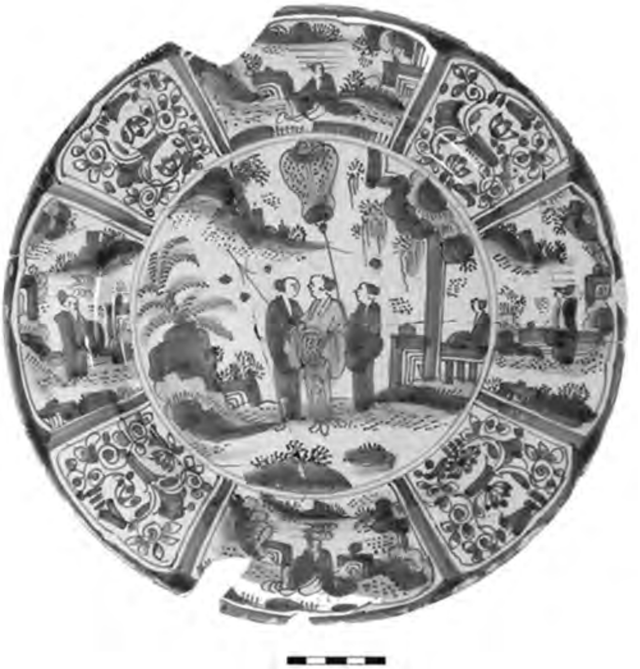

Figure 3.7.1 Blue-and-white faience plate manufactured 1650–1675 CE and found in Hoorn, North Holland. Courtesy Michel Bartels, Hoorn Archaeological Service

The first Chinese porcelain in North America appeared in English Virginia, but Dutch ships were principally responsible for transporting it there (Mudge 1986: 85). Archaeological research in Dutch New Netherland, though limited, helps to illustrate the early years of European globalization in the Atlantic World.

Globalization and the colonial New Netherland

The activities of the Dutch United Provinces in the early modern era provide an excellent case study for investigating globalization. Archaeologists can assess the local implications of globalization at long-abandoned house sites and communities, and link research on the small scale with research conducted on larger scales. Multi-scalar analyses of the implications of globalization and its impacts on individuals and communities provide greater depth of interpretation (see Feinman this volume; Knappett, this volume). The seventeenth-century Dutch communities of Fort Orange and Beverwijck in today's upstate New York represent excellent arenas in which to examine globalization from the ground up. This region is illustrative for three reasons.

First, Dutch interest in the region was initially purely economic. Their grobalizing goal was to exploit the lucrative fur resources of the upper Hudson River valley and its hinterlands at the expense of their European competitors. The Dutch planned to obtain the furs of raccoon, mink, bobcat, otter, fox and the all-important beaver from indigenous hunters and then ship the furs to Amsterdam and then on to continental Europe for processing (Jacobs 2009: 11–12). In a region having no significant deposits of gold – as the rival Spanish had found in Central and South America – furs were the best option for creating wealth in the American northeast. Adriaen van der Donck, in his description of New Netherland published in 1655, spent several pages explaining the beaver to Europeans who had never seen such a creature. After describing them, he observed that 'the beaver is the main reason and the source of the means for the initial settlement of this fine country by Europeans' (Van der Donck 2008: 115). The Dutch, through their efforts at places in the Hudson River valley and elsewhere, invented many features of today's capitalist globalization (Robins 2006). Their most lasting creations are the stock exchange, profit-based managerial incentives, speculative spot and futures markets, a belief in social advancement through commerce and the granting of civil authority to corporate entities (Dash 1999: 101–02; Garber 1989; Irwin 1991; Scammell 1981: 403; Schama 1987: 347–48).

Second, the early seventeenth-century date of the Dutch settlements in the upper Hudson River valley occurred at a time when the nature and direction of intercultural relations were just beginning to be established between European newcomers and long-resident Native Americans. Dutch habits, customs and practices were new to those peoples already living in the region. No blueprint existed to manage intercultural relations, so the participants had to devise the character and conditions of contact and association. Some Dutch men and women understood and accepted the cultural differences between Europeans and Native Americans, but many Dutch traders and colonists entered North America with Eurocentric viewpoints and convictions. Regardless of national origin, many Europeans viewed Native Americans as inherently inferior (Orser 2012; Rothschild 2003: 80–83). For example, the Reverend Jonas Michaëlius, New Netherland's first minister, described indigenous people as savage, wild, 'uncivil and stupid as garden poles' (Jameson 1909: 49, 126). Europeans often infantilized the indigenous peoples of the New World. Raleigh, for instance, described South America's indigenous peoples 'as harmless as children of 10 or 12 yeares [*sic*]' (Schomburgk [1848] 2010: 150). This view of the autochthonous peoples of the European New World was pervasive among many Europeans new to the continent.

Third, the presence of the Dutch in the upper Hudson River valley proclaimed their global desires and plans. Situated between French settlements to the north, English colonies to the east, and surrounded by Native American villages, the Dutch presence inserted another European wedge into the region. The geopolitics surrounding their presence presented a new dimension to European–Native American and European–European interaction. Neither the French nor the English, nor their indigenous allies, could ignore the Dutch intrusion. Though accepting the same central tenets of ownership, the English and Dutch wrangled over the legality of the Dutch settlement of the Hudson River valley for many years. The English believed in ownership by discovery alone, whereas the Dutch understood the legality of ownership to be based on discovery but also occupation and use by at least 50 colonists (Jacobs 2011: 161–62).

In 1609, an Englishman employed by the Dutch East India Company named Henry Hudson was ordered to sail east to China. Instead, he sought a passage to Asia by travelling west. Rather than finding China, he sailed up the river that today bears his name. Going as far north as the channel would allow, he realized the immense wealth in furs that could be collected from the local residents, and when he arrived back in Amsterdam, he explained the richness of the region. Shortly thereafter, in 1614, Dutch investors established their nation's first American outpost, Fort Nassau, on an island in the upper Hudson River near present-day Albany, New York (Figure 3.7.2). This small wooden trading post was located in the midst of Mahican territory (Huey 1998: 13). Spring rains washed it away three years later, but, in 1624, the recently created Dutch West India Company (WIC) built Fort Orange to replace Fort Nassau. In 1626 they ordered the construction of Fort Amsterdam at the tip of Manhattan Island (Fabend 2012; Jacobs 2009). The Dutch continuously occupied Fort Orange from 1624 to 1664.

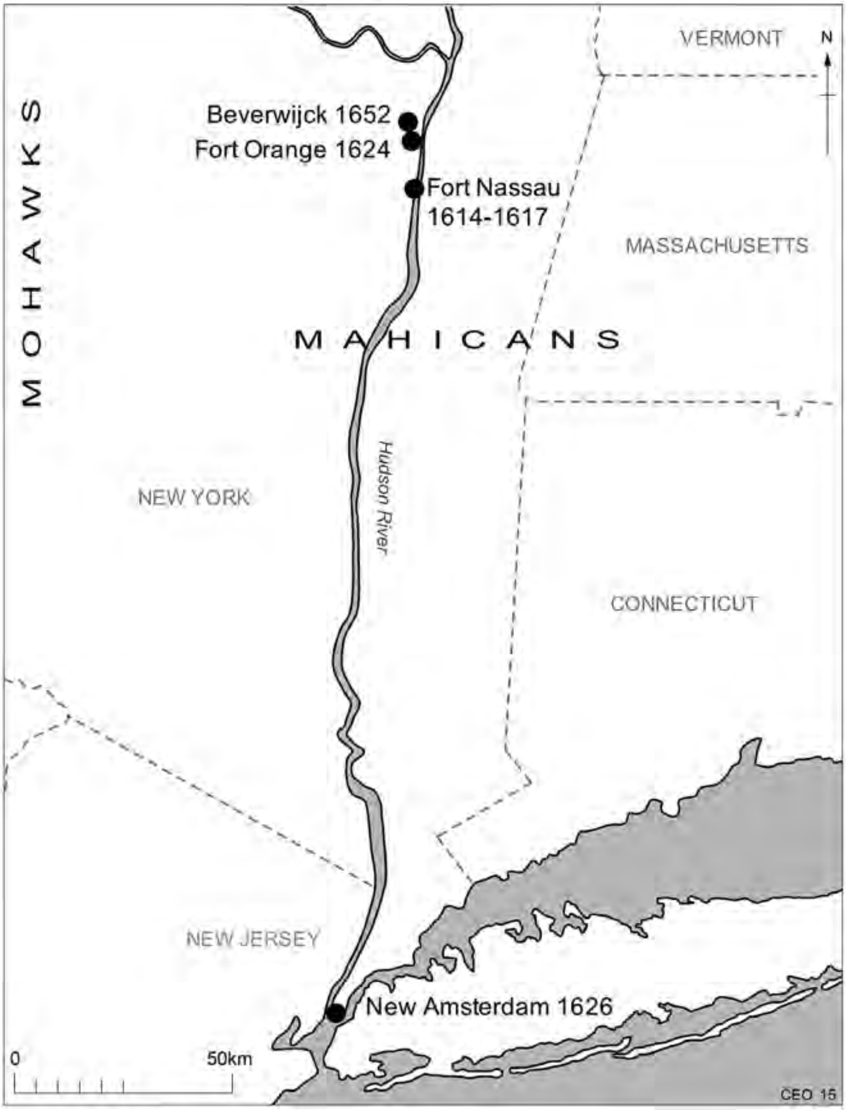

Figure 3.7.2 The Hudson River valley showing the principal seventeenth-century Dutch settlements

Fortifications are typically perceived as outposts of empire, and Dutch forts indeed had this function. It would be equally accurate, however, to refer to the forts as depots of grobalizing capital. Employees of the WIC constructed forts as commercial centres because 'profit making was the major focus of colonial administration' in New Netherland (Goodfriend 1992: 8; also see Hine 2003: 74–76; Jacobs 2005: 191–92). The preamble of the 1621 charter of the WIC listed 'shipping, trade, and commerce' as the company's three objectives, all goals to be realized at the expense of rival European nations (Enthoven 2005). The location of Fort Orange gave the WIC easy access to both Mahican and Mohawk traders and hopefully, through them, to other cultures living further away.

Economics was the WIC's primary mandate, but the company realized in 1629 that they needed to attract colonists to provide support for the traders and merchants (Jacobs and Shattuck 1996: 95, 97). As a result, WIC administrators in Amsterdam developed the patroonship system in the hope of encouraging wealthy landowners to purchase estates in New Netherland. These entrepreneurial investors would infuse the region with much-needed private capital (Rothschild 2003: 84). Patroonship represented a compromise between the WIC and a powerful private faction in Amsterdam who sought to colonize Dutch North America for its own benefit. Despite their opposition, both groups shared a commitment to grobalization. Patroons had the right to settle colonists on their huge colonial fiefdoms at their own expense with the understanding that the tract's natural resources belonged to them. Furs, the only exception, remained the WIC's property. Patroons had complete jurisdiction over the settlers and the landscape, but the WIC technically retained legal ownership of the land itself (Jacobs 2009: 69–70).

In 1629, Kiliaen van Rensselaer, a wealthy Amsterdam merchant, ordered his agents to purchase a vast tract of land on both sides of the Hudson River extending north and south of Fort Orange (Merwick 1980: 55–56; see also Venema 2011). The patroonship, named Rensselaerswijck, was intended to be agricultural and rural, but in 1652, Pieter Stuyvesant, the governor of New Netherland, decreed that a town could be established on the western bank of the Hudson River within one cannon shot (about 900 m) of Fort Orange. The Dutch called this WIC town Beverwijck ('beaver district'), a name signifying both the town's removal from the patroon's control and the continued significance of the beaver trade (Venema 2003: 53). (When the British obtained control of the Hudson River valley in 1664, they renamed Beverwijck Albany and New Amsterdam New York.)

Many of the immigrants arrived in Beverwijck intending to farm. Most quickly realized, however, that the fur trade was a much more lucrative, though illegal, activity. In response to the growing illicit trade carried on by the settlers, in 1640 the WIC lifted its ban on settler trade with Native Americans (Huey 1998: 14). Making the trade accessible to all Beverwijck residents meant that Fort Orange and its immediate area (only 240 km north of New Amsterdam) effectively became an inland entrepôt of globalization. The Dutch presence in the Hudson River valley was never intended to be colonial in the classic sense of the term. Rather, Dutch men and women were there to obtain furs from Native Americans in exchange for mass-produced objects. The early seventeenth-century Dutch settlements on the upper Hudson River were originally designed as nodes in the emerging and rapidly expanding network of globalization that had its modern beginnings in the spice, silk and porcelain trade with Asia. As evidence of their designs, as early as 1633, only nine years after the construction of Fort Orange, the Dutch established a packet service to move consumer goods up the river from New Amsterdam to Fort Orange (Mudge 1986: 94).

Fort Orange came into existence just after the end of the *kraakporselein* period (1620) and during the transitional period of Chinese export porcelain production (1620–80) (Mudge 1986: 64; see Pitts this volume). In fact, the fort's occupations occurred in concert with the grobalization of Chinese export porcelain (Goodfriend 1992: 8–21; Huey 1988, 1991, 1998). The habitation of the fort also occurred within the era that European and New World potters, including those in the United Provinces, produced majolica and faience in increasing numbers, much of it meant to imitate Chinese export porcelain (Wilcoxen 1987a: 57–71).

At Fort Orange, Wan-Li-decorated tin-glazed wares appear in deposits dating to 1624–1657, the same time that Jingdezhen porcelain was making its first appearance there (1651–1664) (Wilcoxen 1987b: 41). Like shards found in Europe, these pieces occur in the same contexts as duplicate porcelain shards (Figures 3.7.3, 3.7.4 and 3.7.5).

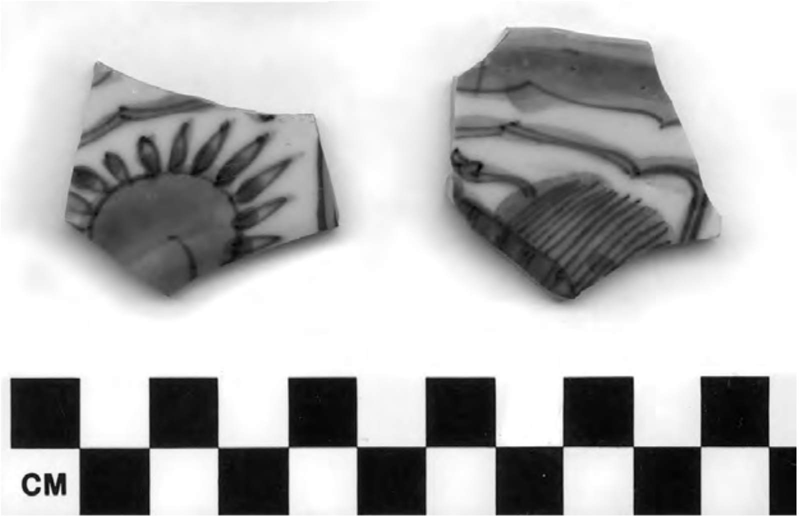

Figure 3.7.3 Wan-Li porcelain shards excavated at Fort Orange. Courtesy of Paul Huey

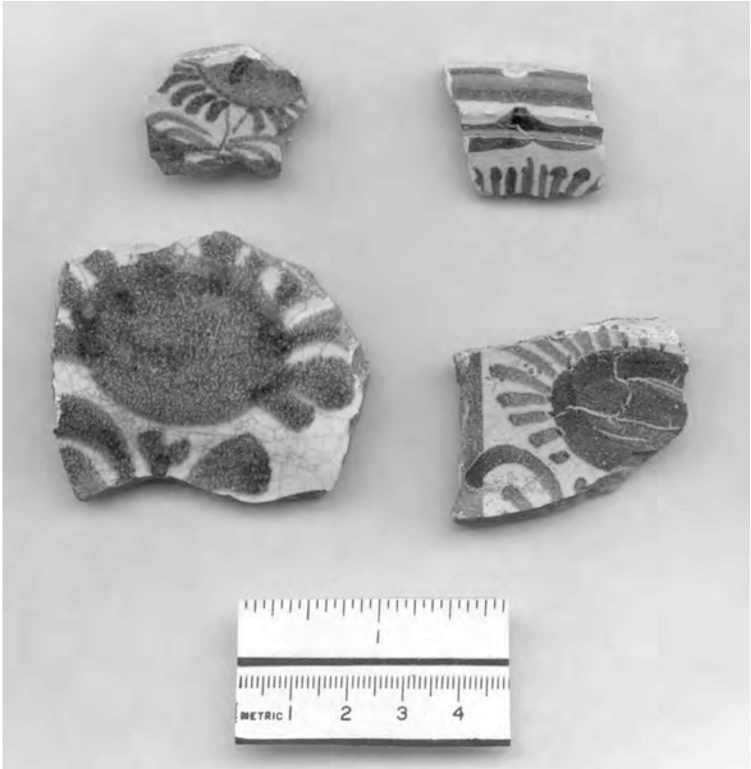

Figure 3.7.4 Tin-glazed earthenware with Wan-Li motif excavated at Fort Orange. Courtesy of Paul Huey

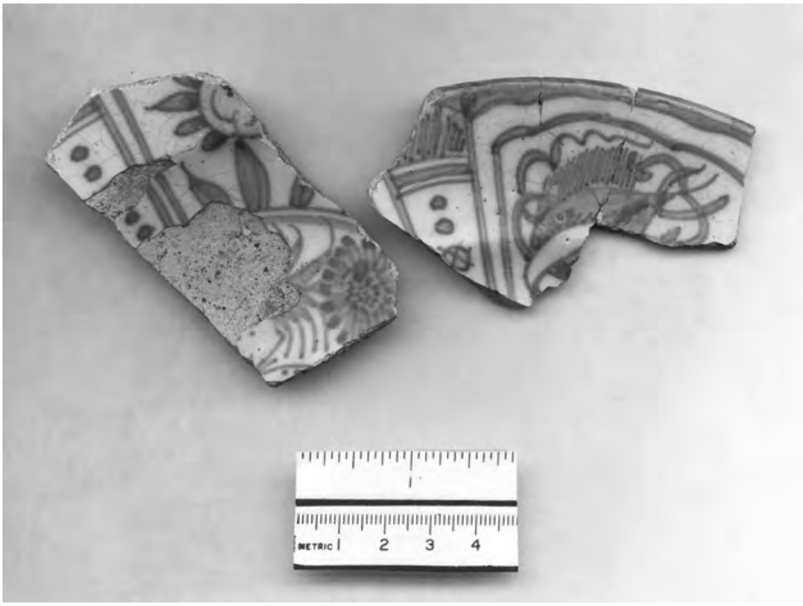

Figure 3.7.5 Tin-glazed earthenware with Wan-Li motif excavated at Fort Orange. Courtesy of Paul Huey

Paul Huey directed salvage excavations at Fort Orange in 1970–1971 during the construction of a freeway in downtown Albany. His effort represents the only excavation undertaken at the site. A line of excavation units placed across the eastern portion of the fort uncovered portions of four seventeenth-century buildings. During the excavations, Huey and his crew discovered an array of Dutch and non-Dutch trade and domestic items, including mouth harps, glass beads, wampum shells, white clay smoking pipes, and lead bailing seals. Among the ceramics were German stoneware, Iberian, Italian, and English earthenwares, Hispanic majolica, and Chinese export porcelain. The presence of these items makes it clear that Fort Orange was a node in 'the larger webs of international alliances' linking indigenous traders with Dutch fur buyers (Huey 1998: 21) and tangibly connecting the Old and the New Worlds.

The deposits at Fort Orange were distinct enough to allow Huey to divide them into time segments (see Huey 1988). Simplified, the distribution of ceramic shards shows the importation and use of various ware types at the fort during the Dutch era (Table 3.7.2). Shard counts are not as useful as minimum number of vessel counts, but they permit some initial observations. First, porcelain does not appear at the fort, even in small numbers, until the 1650–1664 period. This porcelain was not the *kraakporselein* taken from Portuguese ships, but rather the mass-produced pieces from Jingdezhen that had directly entered the Dutch commercial network. Second, red-bodied and tin-glazed earthenwares dominate in each era: 90 per cent (1624–1640), 77.7 per cent (1640–1650), and 83.5 per cent (1650–1664). A large number of historical and archaeological factors may account for these frequencies and not too much weight can be accorded them. Even so, this minimal evidence indicates that the most common ceramic types used in colonial-era Netherlands and New Netherlands were red-bodied and tin-glazed earthenwares (Schaefer 1998; Wilcoxen 1987a). Several red earthenware potters are believed to have emigrated to New Netherland in 1653, and at least one of them, Dirck Claessen

Table 3.7.2 Frequency of ceramic shards at Fort Orange

	1624–1640		*1640–1650*		*1650–1664*	
Type	*No.*	*%*	*No.*	*%*	*No.*	*%*
porcelain	0	0	0	0	7	0.8
tin-glazed earthenware	29	48.3	134	57.5	457	51.3
white-bodied earthenware	3	5.0	23	9.9	33	3.7
red-bodied earthenware	25	41.7	47	20.2	287	32.2
Iberian jar	0	0	2	0.9	22	2.5
stoneware	3	5.0	27	11.6	84	9.4
Total	60	100.0	233	100.1	890	99.9

'de Pottebacker' (pot-baker) is known to have sued a man named Andries Hoppen in 1655 for lack of payment. Claessen sold Hoppen earthenware that Hoppen was planning to resell north of New Amsterdam, possibly as far north as Fort Orange (Nicholson 1989). Excavations of seventeenth-century contexts in Manhattan near the site of Fort Amsterdam have also yielded examples of Dutch-made majolica and faience alongside Chinese export porcelain (Cantwell and Wall 2001: 170–75; Grossman 1985).

Tin-glazed earthenware, much of it undoubtedly produced in Dutch factories, far outnumbers Chinese export porcelain at Fort Orange. The civil wars in China during the ceramic Transitional Period (Jörg 1982: 17; Wilcoxen 1987b: 41) disrupted the flow of porcelain from Jingdezhen and this circumstance may contribute to the disparity in the ceramic frequencies. Whatever the exact cause, it appears that Dutch entrepreneurs had simply grafted their sale of Chinese-like earthenwares onto what would have been the Chinese market in export porcelain. The Dutch market was the Western replacement of a potential Chinese market, but with copies of porcelain rather than the real thing. This practice represents the dialectics of grobalization and glocalization in pure form. Most of the Chinese export porcelain may have stopped in the homes of Dutch elites, with only a trickle of it ever reaching faraway New Netherland (e.g. Baart 1987; Bartels 2005; Schrickx *et al.* 2007; Vermeulen *et al.* 2006; see also Pitts this volume). Most residents of New Netherland had to content themselves with tin-glazed earthenware vessels, like the specimen excavated at Fort Orange exhibiting a decoration 'copied directly from a Chinese porcelain prototype' (Huey 1988: 391).

Early seventeenth-century Dutch merchants were undoubtedly cognizant of their involvement with globalization. Most were interested in trading in bulk commodities, such as furs, but they seldom missed an opportunity to transport other consumer goods, such as German stoneware and Italian slipware and faience (Wilcoxen 1987a: 73–78). German stoneware, Iberian earthenware, and North Devon earthenware were all discovered in the Fort Orange deposits.

Settlers in Fort Orange and Beverwijck were not the only intended consumers of mass-produced objects during the seventeenth century. Archaeologists find European ceramics, in addition to scores of other foreign objects, at seventeenth-century indigenous villages throughout the region. The overwhelming majority of European artefacts traded into Native American communities were made of metal, such as brass ornaments and kettles, iron knives and other implements, and muskets, musket parts and lead (Bradley 2007; Wray 1985). European tin-glazed earthenware was a minor object in the trade, but specimens do appear. For example, the Mohawks had received European ceramics as early as 1614–1624, the era of Fort Nassau's existence (Rothschild 2003: 206). Throughout the course of the seventeenth century, indigenous peoples increasingly used

European ceramics as food containers (Bradley 2007: 109; Jacobs and Shattuck 1996: 109). They also repurposed broken ceramics into ornaments. Ceramic vessels never constituted a major trade item, but their presence at Native American sites coterminous with Dutch New Netherland documents the flow of mass-produced artefacts beyond the European settlements. European-produced goods were objects of grobalization (to Europeans) and objects of glocalization (to indigenous people as they recontextualized and bestowed new meanings upon the foreign objects).

Conclusion

Understanding globalization requires a broad vision, one that considers diversities in culture, space and time. The histories of Chinese export porcelain and its European imitations serve as surrogate indicators of the institution of transnational, multicultural connectivities. Chinese artisans, working in an expanding environment of industrialization, created a distinct class of wares they sold to Indians, Persians, North Africans and diverse Europeans. Upper- and middle-class Europeans, because of their belief in the developing capitalist project, spurred the explosion of the porcelain trade, and first assisted and then participated in the globalization process. Europeans were just beginning to construct consumerist cultures during the sixteenth and seventeenth centuries. European potters, wishing to partake in the process as producers, made tin-glazed earthenware imitations of Chinese porcelain. Even the limited archaeological evidence presented here demonstrates the co-occurrence of Asian and European wares in the same depositional contexts in the United Provinces and in New Netherland.

Archaeological research illuminates the important role of contextualization when autochthonous cultures incorporate and modify the meanings of alien artefacts. Many anthropologists and archaeologists have tended to focus on glocalization in an understandable attempt to demonstrate the power of indigenous people and even members of Western social classes to resist, refashion, stall and deny globalization. To comprehend fully the nature of post-Columbian European globalization into the Atlantic World – and by extension elsewhere – the process of grobalization must also be considered. Rather than merely adding to the lexicon of globalization theory, the dialectics of globalization's internal processes permits examinations of the grobalizer's motivations, tactics and strategies. By recognizing the process of grobalization, archaeologists and other scholars can develop fuller understandings of colonialist and imperialist motives. Concurrently, recognizing grobalization forces researchers to appreciate the complexity and diversity of the ways in which indigenous peoples sought to retain their cultural identities. Globalization was (and is) a dialectical process, and scholars must recognize both sides of the contestation.

The intersection between grobalization and glocalization was clearly evidenced in seventeenth-century Dutch New Netherland. The need for Dutch commercial entities constantly to grow helps explain some of their overarching motivations and daily practices. The tension between Chinese export porcelain and European-made tin-glazed earthenware is only one small indicator of a much wider and more profound process.

Acknowledgments

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Part IV

Australasia and Oceania

4.1

Globalization thinking in Australasia and Oceania

Ian Lilley

This section considers questions of globalization in a vast area of the world often seen to be historically disconnected from the rest of humanity. Indeed, even in this age of hyper-globalization, it is common for otherwise well-travelled people to say how they would love to visit but it is way too long a journey to contemplate. This 'tyranny of distance', as distinguished Australian historian Geoffrey Blainey (1966) popularized the notion, had a definite impact on connections between Australasia and Oceania and the rest of the world in the pre-colonial past as well as in the historical period to which he was referring. The wider region *was* largely beyond the reach of historical events and processes elsewhere, at least during the usually prodigiously long stretches of time between key periods of interchange with regions on the Pacific Rim. On this basis, researchers such as Stringer dismiss the area 'as a place at the edge of the inhabited world where modern humans arrived relatively late and then remained largely isolated from subsequent developments' (1999: 876).

Stringer's assessment accords with countless others going back to the beginnings of European colonial encounters with the inhabitants of the region, views which placed these peoples 'outside the realm of historical experience' (Peterson 2000: 27). Originating in Hegel's division of world history into the ahistorical pre-modern and the historical modern, and elaborated by Marx and Weber in particular, this division pervades Western historical theory, as can be seen in seminal works such as Collingwood's ([1946] 1994) *The idea of history* and Wolf's (1982) *Europe and the people without history*, as well as much of the wider globalization literature. Yet research in the region continually shows that while the dynamics of history may not have played out in the exactly the way or at the times one might expect from patterns elsewhere, cultural change did occur and generally for the same sorts of reasons it occurred in other parts of the world. This is well illustrated by what have been called the Pacific 'empires' of Tonga and Yap.

As Clark's chapter on Tonga in this volume describes, 'On current evidence only Tonga and Yap had well-developed maritime systems that regularly incorporated people from other island groups.' Should they be called 'empires', though, a term that lines them up against the much better-known Old and New World examples considered elsewhere in this volume? The anthropologist Glenn Peterson put it this way:

> I am led finally to conclude that for comparative purposes, it is fair to describe the frameworks of relationships spreading outward from Yap and Tonga as species of empire. Although they resemble such modern empires as those of the Hapsburgs, Romanovs, and Ottoman Turks in only the most marginal ways, and bear even less resemblance to the late 19th-century European empires, they appear to fall within a range of world historical processes that establish 'empire' as something considerably more than what is has come to mean in most contemporary usage.
>
> *(2000: 26)*

In similar vein, Clark considers 'whether the Tongan state can be considered as a prehistoric globalization' in terms of current ideas on the subject. The idea that pre-colonial Tonga or any other Pacific society is considered a state, let alone a globalizing one, might surprise some. Be that as it may, the Polynesian societies of Tonga and Hawaii are generally seen as primary states that arose through independent development within the last 1,000 years (e.g. Hommon 2013, Kirch 1984). Clark (2006) determines that: 'Trying to partition the variability of Tongan influence within a "core-periphery" or "empire" structure with sparse archaeological data is not currently feasible, nor is an in-depth understanding of the effects of culture contact on the Tongan state.'

It is telling that Clark (2006) is as yet unable archaeologically to categorically determine that one of only two Oceanic societies to be considered either a state or an empire was a 'globalization' in contemporary parlance. Yet it is also important to note that he does not categorically dismiss the idea, contending that 'globalization criteria . . . offer an appropriate framework for considering the unique maritime state, the political workings of its elites, and the vulnerability of the Tongan system to internal and external challenges'.

Thus it is with all the chapters in this section. In addition to Clark's consideration of the 'Tongan empire', the authors here examine questions as diverse as patterns through time in the manufacture and distribution of stone tools amongst Aboriginal Australians, the connection of Torres Strait to larger globalizing processes, the extraordinary Lapita phenomenon associated with the initial human colonization of the remote Pacific, and more recent patterns of interaction in Melanesia and Polynesia. In doing so, they push at the limits of conventional conceptualizations of globalization even more than other chapters in this volume do. The chapters are presented in alphabetical order. This is because it makes little sense to order them chronologically, owing to the very different temporal frameworks in focus in the various geographical areas under consideration.

Hiscock and Maloney use the idea of globalization as social connectivity to take an innovative look at the scale of trends towards globalization of technology within prehistoric Australia. Using globalization frameworks to consider hunter-gatherer behaviour in the remote past is rare if not unique in the archaeological literature, even at scales much smaller than these authors' continental perspective. This work expands usefully not only on our understanding of stone artefact manufacture and distribution, but also on hitherto limited archaeological discussions of the complex 'chains of connection' (Mulvaney 1976) that at the time of European colonization linked Aboriginal communities down-the-line from one side of the continent to the other, and joined it to island Southeast Asia and the Pacific across the Arafura Sea and through the islands of the Torres Strait.

My own chapter considers 'glocalization' in island Melanesia, specifically in long-distance maritime trading networks around the coasts of New Guinea. I am concerned to show how agents of globalization on the one hand, and of local identity on the other, sustained their interdependent existences by manipulating the production and distribution of distinctive local products though systems of regional interaction which might otherwise have minimized local specificities and homogenized cultures. Although the term 'glocalization' derives from Japanese marketing parlance, I contend that it is useful to understanding the situation in Melanesia. This is because it entails what Roland Roberston, who originally brought the notion to the attention of globalization scholars, describes as 'the tailoring and advertising of goods and services on a global or near-global basis to increasingly differentiated local and particular markets . . . [and] involves *the construction* of increasingly differentiated consumers, the "invention" of "consumer traditions"' (1995: 28–29, his emphasis).

McNiven considers four great globalizations that encompassed Torres Strait, which lies between mainland Australia and New Guinea. The first globalization concerns the permanent occupation of the islands of the Strait following postglacial sea-level stabilization some 3,500 years ago. This is connected with the processes on the Australian mainland considered in Hiscock and Maloney's chapter. It was followed, around 2600 BP, by the impacts of the Lapita expansion into the Pacific, as addressed in detail in Sand's chapter. The third, which connects with events and processes discussed in this volume's Southeast Asian section, concerns the impact of Asian links with northern Australia in the centuries immediately before European colonization. McNiven's final globalization is that European colonization itself, which of course continues to impact upon life in Torres Strait today.

Sand tackles the profound change in Pacific history that occurred some 3,000–3,500 years ago, when expanding speakers of Austronesian languages spread out of Southeast Asia into the New Guinea region and sparked the development of what archaeologists call the Lapita Cultural Complex. Lapita developed in the Bismarck Archipelago through interaction between migrants and existing populations, before spreading into the Pacific as the founding human society in all the islands beyond the main Solomons chain as far as Tonga and Samoa to the east and New Caledonia to the south. The production of a distinctive tradition of intricately decorated pottery across an area more than 4,500 km wide, associated to the long-distance exchange of material goods and production of related sets of shell ornaments, signals a major globalizing phenomenon. Sand's discussion allows us to understand the complex connectivities that developed between communities, archipelagos, and Lapita 'provinces', in a way that clearly disentangles the global from the local.

Weisler and Walter ramp up the scale again to address variations through time in patterns of connectivity across the broad sweep of eastern Polynesia. Interaction was integral to precolonial Pacific Island societies. These authors draw attention to the variability in networks of connectivity that shared a common pattern of early widespread communication, followed by the contraction of interaction spheres and changes in basic modes and materials of exchange. The East Polynesian case highlights the pivotal role of connectivity as a colonization strategy, as a condition of geography, and as a process contributing to the long-term sustainability of human communities. The changing scale, configuration and chronologies of interaction indicate that connectivity – that is, a tendency towards globalizing strategies – did not emerge through social transformation, but was a pivotal strategy for colonizing the remote Pacific.

Are the results presented in these chapters worth the effort, or do they stretch the application of globalization theory beyond the limits of scholarly credibility? While they differ in focus and scale, all show the waxing and waning of what the authors conceive of as globalizing systems. This they share with many chapters in other sections of the volume and indeed the patterns they describe are largely what would be predicted from general globalization theory. Clearly, then, while patterns of change in Australasia and Oceania may vary in detail from those elsewhere around the world, they do not differ in broad outline. In short, the chapters reinforce the point that while the societies in this huge region may have been isolated from those elsewhere, they were definitively not outside the realm of world historical experience. This is no small thing in the context of deep-seated theoretical formulations which have long asserted the opposite.

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4.2

The Tongan maritime state

Oceanic globalization, polity collapse and chaotic interaction

Geoffrey Clark

Introduction

The islands of the Pacific Ocean are frequently associated with maritime societies who were equipped with ocean-going canoes and the navigation techniques required to migrate across the vast distances separating island groups. Colonization aside, the development of complex maritime societies is surprisingly rare in Oceania, as many islands were in prehistory beyond the influence of primary and secondary states and the trade networks of empires that were a feature of social development and hierarchy in other parts of the world (Taagepera 1978; Chase-Dunn and Hall 1997). Thus, the human history of the South Pacific Ocean is significantly different from that of the Indian Ocean and the Mediterranean Sea where early seafaring was largely economic and strategic, and islands were key locations of early globalization. Powerful socio-political configurations only arose in the Pacific centuries after human colonization predominantly, it is thought, by independent development, and only a small number of societies can be argued to have developed into archaic states in the past 1,000 years.

On current evidence, only Tonga and Yap had well-developed maritime systems that regularly incorporated people from other island groups (Kirch 1984; Petersen 2000), and in this chapter I examine whether the Tongan maritime state can be considered as a prehistoric globalization. As Jennings (2011, this volume) and others have noted, episodes of globalization/interaction are characterized by a surge in centralized interaction that is often followed by a phase of chaotic interaction when centres fail to control their periphery/colonial networks (Marcus 1998; Hall and Chase-Dunn 2006). Interaction does not necessarily decline in these situations and indeed may increase, but it is fragmented, opportunistic and is no longer linked to a 'globalizing' culture (see also Knappett *et al.* 2010; Knappett this volume). The rise and fall of the Tongan state supports this proposition with the impact of the truly worldwide powers of the West contributing to government failure and political instability that was accompanied by a phase of decentralized 'chaotic' interaction. Indigenous polity collapse was assisted by the arrival of introduced diseases that caused high rates of population mortality, which weakened the basis of chiefly leadership and supported the establishment of an intrusive ideology and political system of the new hegemonic powers.

The Tongan state as prehistoric globalization

Around 1200–1300 CE, a chiefly patrilineal lineage led by the holder of the Tu'i Tonga title unified the scattered islands of Tonga and placed them under a single political system. The centralization of government was unique in Oceania where chiefdoms held sway over an island or parts of an island group, but seldom over an entire archipelago. Genealogies record 39 holders of the Tu'i Tonga title representing 35 leadership generations, suggesting the lineage had ruled Tonga for around 700 years (Fenner 2005). The Tu'i Tonga system has been described variously as a 'maritime chiefdom', 'maritime empire', 'primary state' and 'polity', reflecting the geographic extent of its interactions and complex chiefly hierarchy (e.g. Kirch 1984; Petersen 2000; Hommon 2013). Early European arrivals who stayed in Tonga for extended periods, such as Captain James Cook, described Tonga in 1777 CE as a 'little state' with a well-defined system of government in which highly ranked chiefs were responsible for control of the population, agricultural production and for maintaining the paramount Tu'i Tonga who was descended from the god Tangaloa Eitumatupua (Beaglehole 1967a: 177).

Does the Tongan state represent a prehistoric globalization? Following Jennings (2011, this volume) I examine this question under three criteria that an expanding society should meet to be considered as something more than a regional power or interaction sphere. The first is the presence of centrality and urbanism, the second is a surge in inter-regional interaction and the third is the creation of a global culture.

Centrality and urbanization

European visitors to Tongatapu noted that settlement consisted of continuous plantation–habitation compounds that were fenced or palisaded and separated by roads with public spaces and burial areas at major intersections. The exception to this pattern was the central place of Mu'a where the political development of the Tongan state is inscribed on the landscape by monumental structures. The Tu'i Tonga (TT) was the oldest and most senior line whose compound was outlined by a substantial ditch that in places penetrated the limestone bedrock and tapped the freshwater aquifer (Figure 4.2.1). The burial places of the Tu'i Tonga and close family members were built from *c.*1300 CE using quarried slabs of reef limestone or intertidal beach rock. The stone slabs were used to build a rectangular-square platform tomb with one to five levels known as *langi* (Tongan 'sky').

Traditions record lineage segmentation at the time of the 24th Tu'i Tonga (*c.*1550 CE) when the responsibility for practical government and support of the TT was given to the Tu'i Tonga's younger brother who was given the title of Tu'i Ha'atakalaua (TH) (Figure 4.2.2). At Lapaha the compound of the TH was made by reclaiming land from the Fanga 'Uta Lagoon, with more than 200,000 m^3 of fill used to make the new chiefly precinct (Clark *et al.* 2008). Significantly, the reclaimed TH area contained a canoe harbour and wharf, where tributes and offerings were brought by large double canoes. The TH lineage controlled the distribution of incoming wealth, in part, by ensuring that the TT retained the largest share.

At the time of the sixth TH (*c.*1650 CE) a third collateral lineage was formed when the TH appointed his half-Samoan son, Ngata (Figure 4.2.2), as the first Tu'i Kanokupolu (TK). The compound of the TK lay south of the area occupied by the TT and the TH, but there is no record of stone tombs being built at Mu'a for this lineage. Instead, single-level stone-faced burial platforms were built in the west of Tongatapu, where the lineage developed a power base that became increasingly independent of the TT and TH. Finally, the marriage of the Tu'i Tonga's (TT-29) sister to a Fijian chief gave birth to another chiefly line known as the *fale fisi*

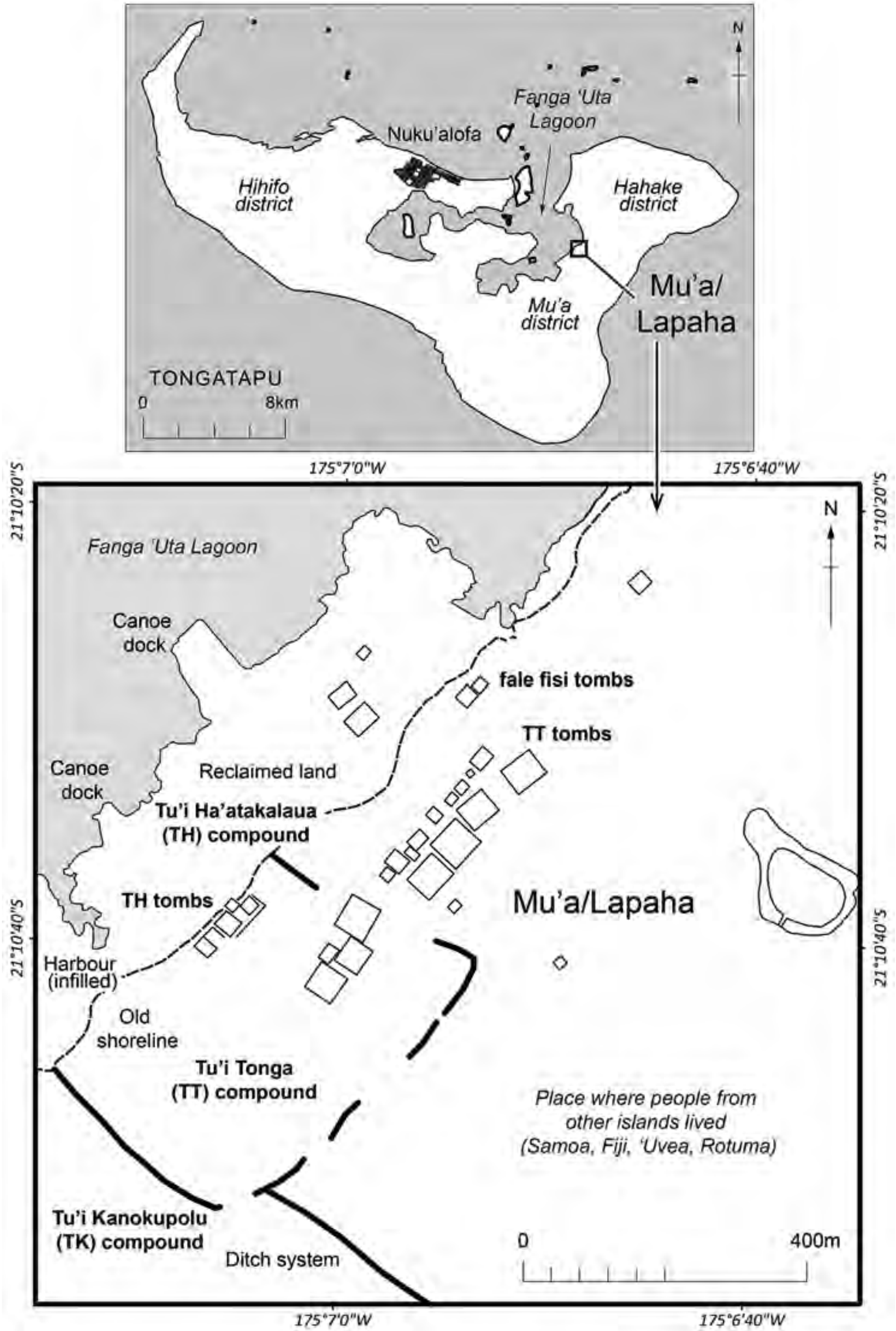

Figure 4.2.1 Tongatapu Island (top) and the central place of Mu'a/Lapaha showing the separation of chiefly compounds established by lineage segmentation. Tu'i Tonga (TT), Tu'i Ha'atakalaua (TH), and Tu'i Kanokupolu (TK)

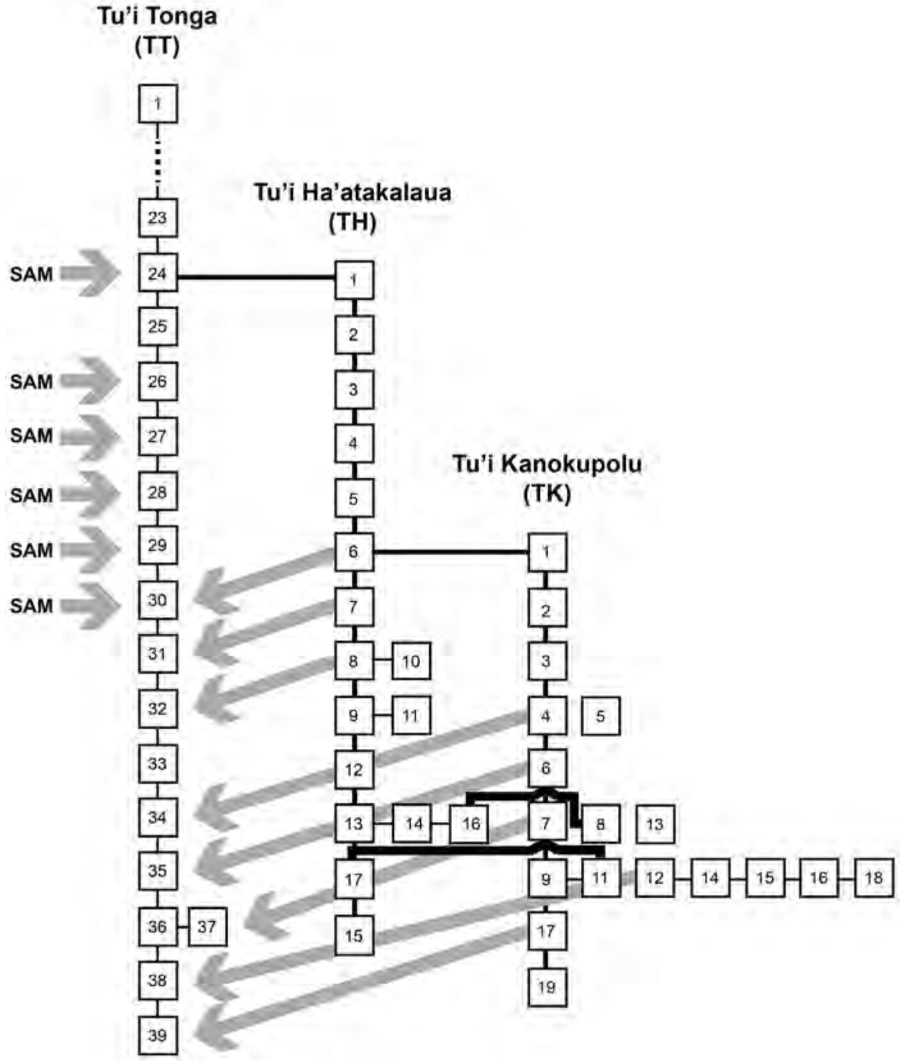

Figure 4.2.2 Lineage segmentation and marriage patterns. SAM = high-status Samoan women married to the Tu'i Tonga (several TT prior to the TT-24 also had Samoan wives). Grey arrows indicate wife giving from the junior Tu'i Ha'atakalaua (TH) and Tu'i Kanokupolu (TK) lineages. Black lines indicate an individual who held both the TK and TH titles. Note the presence of multiple title holder in the same generation in TH (13–16) and TK (7–18) lines as a result of political instability, warfare and chiefly competition in the post-European contact era

(house of Fiji) that also built stone tombs, which were constructed north of the TT's compound (Figure 4.2.1).

The development of an urban centre at Mu'a with an area of over 50 ha emphasized the semi-divine origins of the Tu'i Tonga and legitimized a government system in which decision-making along with ownership of land were the prerogative of the titled chiefly class. Further, Mu'a was the centre of a vast maritime network that received goods for chiefly consumption and redistribution, and it was a significant interaction hub through which people, ideas and goods moved to other islands within Tonga and places far beyond Tongatapu. A major and regular event that made Mu'a an interaction hub was the *inasi* – the annual/biannual presentation of staples and preciosities to the Tu'i Tonga, who mediated with the god Hikuleo to ensure the prosperity of the Tongan people and the fertility of the land and sea in the coming year.

Long-distance interaction and chiefly influence

Visitors to Tonga in the late eighteenth century were quick to note that it was cosmopolitan in comparison to other parts of the Pacific, with people and products arriving from other Pacific islands. During Cook's 1777 CE visit, Samoa was claimed to be under Tongan rule, but the islands of Fiji were independent and it was stated that the fractious relationship with Fiji involved disputes over prestige goods such as red feathers, double canoes and pigs (Beaglehole 1967a: 164, 1967b: 957–58; Labillardiere 1971: 356). A list of islands not seen by Cook but said by Tongans to be in the vicinity of Tongatapu was recorded by William Anderson and included Rotuma, Tuvalu, Kiribati, Tokelau, 'Uvea and Futuna in addition to individual islands in the Samoa and Fiji groups (Geraghty 1994).

Tongan leaders controlled much of the long-distance trade and exchange through ownership of large double canoes, which were used in the inter-archipelago movement of preciosities such as fine mats, pearl shell ornaments, sandalwood, red feathers and chiefly spouses. The latter involved the occasional marriage of Fijian chiefs to female relatives of the Tu'i Tonga and regular marriages between high-status Samoan women and the holders of senior titles in Tonga. Chiefs were polygamous and high-status marriages were strategic and regulated to increase/maintain political position and to expand the geographic sphere of chiefly influence.

The potential size of marriage networks able to be deployed by the Tongan paramount was extensive as indicated by the twenty-ninth Tu'i Tonga Uluakimata (*c.*1600 CE), who is reputed to have married three chiefly wives who brought with them 200 secondary wives (*fokonofo*). Compared to the Tu'i Tonga we know relatively little about his wives, but Bott (1982: 105, 107) indicates that one of Uluakimata's wives was Samoan (Talafaiva) and another was from Hihifo (Mata'ukipa) on Tongatapu. The daughter of Uluakimata married a high chief from Fiji so that the ruling line of Tonga was connected through elite marriages to Samoa, Fiji and many parts of Tonga (Figure 4.2.2). Traditional history and archaeological data from 'Uvea (Wallis Island) indicate that the southern part of 'Uvea was under the control of Tonga at the time of Uluakimata (Burrows 1937; Sand 1993, 2008).

The marriage networks of the Tu'i Tonga represent a potentially vast area of direct chiefly influence, but is there evidence that the Tongan state was associated with a surge in prehistoric interaction which is seen as a criterion of globalization? A recent geochemical study of stone tools found in association with the tombs of the Tu'i Tonga shows that long-distance interaction by the Tongan state was widespread and frequent. The stone tools used to finish the limestone and beach rock slabs used in the tombs were probably quarried and transported by the paramount's kingroups, who were assembled to construct the chiefly tombs (Clark *et al.* 2008). Stone tools from the tombs of the Tu'i Tonga were sourced to Tonga (central Tongan islands and 'Eua), Samoa and east Fiji. As Samoan and 'Uvean volcanics are difficult to chemically separate it is not possible to rule out the presence of tools from 'Uvea, although the hegemony of Tonga may have meant that elite marriages involving 'Uveans were uncommon at Mu'a (see McKern 1929: 44–45). The presence of stone tools from Samoa and east Fiji matches the Tu'i Tonga's family connections with these archipelagos, suggesting that a complex web of chiefly relationships existed across the central Pacific in late prehistory.

Sourcing of stone tools from monumental sites of the Tongan state also demonstrates a high frequency of long-distance interaction with two-thirds of lithics from inter-archipelago imports especially from Samoa and west/east Fiji, respectively 860 km and 430–740 km from Tongatapu. Even more remarkable is that one stone adze found in the foundation trench of the largest stepped tomb at Lapaha was sourced to Tahiti – more than 2,500 km distant (Clark *et al.* 2014). A connection with the Society Islands is also suggested by a carved head of a Tahitian canoe seen by Captain Cook in one of the god houses built on top of a tomb at Mu'a (Beaglehole 1967a: 139), although connections between the two island groups may not have been common. It is perhaps significant that the 1769 CE map made by the Rai'atean navigator, Tupaia, indicates Tahitian knowledge of Tonga, Samoa, Rotuma and 'Uvea, suggesting two-way voyaging and the transfer of social and political information between West Polynesia and East Polynesia (Di Piazza and Pearthree 2007)

The advent of the Tongan state clearly marks a surge in maritime interaction that represents the centralization of political power at Mu'a, manifested by the construction of the burial places of the paramount. The tombs not only reified the apex position of the Tu'i Tonga in Tongan society, but also – affirmed by their replication across the landscape – orderly title succession and stable government. The extensive biosocial networks of the Tu'i Tonga were an important means of expanding chiefly influence across the archipelago and to neighbouring island groups. Elite networks were the essential conduits for a variety of inter-cultural relations that included warfare/raiding, colony emplacement, chiefly marriage, tribute, and funerary activity in addition to the exchange of prestige and staple goods.

The Tongan state and a 'global' culture

Significant growth in long-distance interaction causes radical change in material culture that is linked to the formation of new social identities and cosmopolitan relationships. Jennings (2011, this volume) identifies eight characteristics that a prehistoric society should have to be considered a global culture; time–space compression, de-territorialization, standardization, unevenness, homogenization, heterogeneity, re-embedding and vulnerability. There is significant overlap in several of these terms, for example 'cultural heterogeneity' and 're-embedding of local culture', and despite the possibility that many complex societies with external trade-exchange networks might be argued to be global cultures using the eight criteria, they are nonetheless useful for considering the diverse relations of the Tongan state.

Time–space compression

Maritime transport was a critical variable in the development of interaction networks in the Pacific and the construction of large double-hulled canoes was a significant development that is undated, but probably dates to the past 1,000 years. In Tonga, there were two types of double canoe; the *tongiaki* (two equal-sized hulls up to 60–70 feet in length and joined by cross beams to form a raised platform), and the *kalia* (two unequal hulls that could be tacked by shunting and sailed with either end of the vessel forward). Variation in the deck fittings, riggings and mast/spars of Tongan canoes noted by Hodges and Webber in 1777 CE indicate that canoe technology, particularly from Fiji (*drua* and *camakau*) was being used in canoes made in Tonga and Samoa (Haddon and Hornell 1936; Krämer 1995: 297). Large Tongan canoes in the late eighteenth century could carry 80–100 men or more (Beaglehole 1967b: 1038) and were equipped to make regular voyages of 3–5 days' duration. Cook went on board one of these vessels and

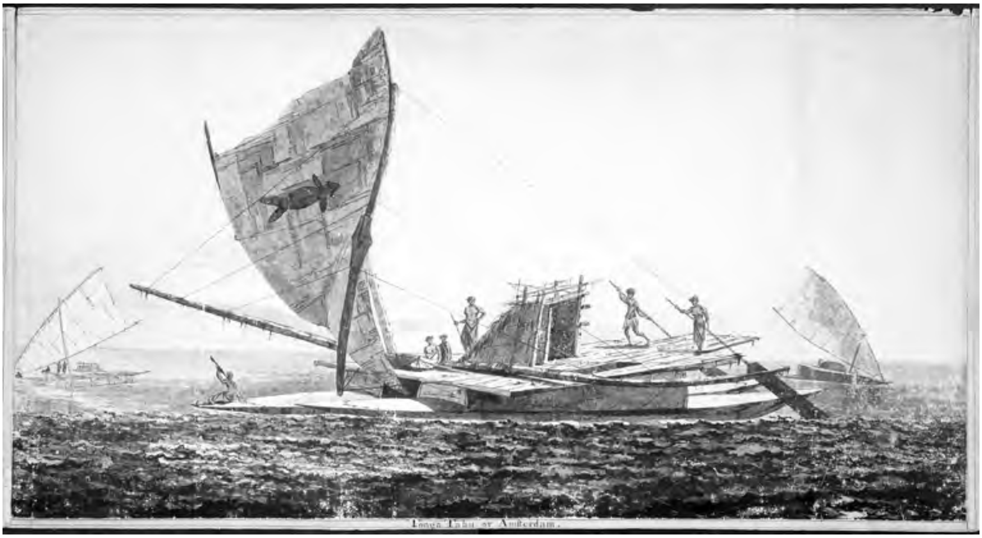
Tonga Tabu or Amsterdam.

Figure 4.2.3 A Tongan voyaging canoe (*Tongiaki*) by William Hodges during Cook's second voyage in 1774 CE ('Sailing canoe of Tonga Tabu or Amsterdam'). Collection of the author

measured vessel speed with a log and estimated that large Tongan sailing canoes would travel 11–13 km/hour under favourable conditions (Figure 4.2.3). The sailing rate suggests a range of 330–470 km (three days) and 550–780 km (five days; Cook recorded that a Tongan sailing 'day' consisted of 10–12 hours, Beaglehole 1967b: 164). High chiefs visiting Cook were often noted as arriving in large double canoes or as being able to command such vessels. Thus, time–space compression was a prerogative of the canoe-owning elites and was experienced to a lesser degree by the general population.

De-territorialization

Closer relationships with people from distant areas cause the global to become local. Such relationships are evident at Mu'a, where land names record areas where non-Tongans stayed during the *inasi* (Clark 2010: 233). These areas are always found east of the chiefly compounds occupied by the TT, TH, TK and *fale fisi* (Figure 4.2.1), and record locations in Samoa (Apolima, Upolu and Tutuila), 'Uvea ('Uvea), east Fiji (Nahakalau) and Rotuma. As a central place, Mu'a had to accommodate and integrate groups from different islands and it did this by allocating land outside the core area occupied by Tongan elites for foreigners, who were known as *'muli'*. While Tongan elites could be directly connected with foreigners through marriage, broader cross-cultural connections were established through institutional relationships, performances and ceremonies. One example is a performance known as the *me'etu'upaki*, which is a formal dance associated particularly with the Tu'i Tonga and Lapaha and is performed by men carrying a small paddle (*paki*). Kaeppler (1991) considers the *me'etu'upaki* to be a fossilized dance genre that was originally brought from Futuna and performed for the Tu'i Tonga on ceremonial occasions such as the *inasi*. Clearly, the 'international' was strongly associated with the central place of Mu'a, reflecting the pivotal role of elites in dealing with gods, foreigners and people from other parts of Tonga.

Standardization

The Tongan state was a unique political phenomenon in the central Pacific and the paramount status of the Tu'i Tonga was marked by stone architecture from the time of the eleventh TT (*c.*1250–1300 CE). The use of elevated mounds to demonstrate chiefly status is widespread in West Polynesia and while absolute dating of mound construction on many islands is uncertain, it appears from genealogical records than most date to the past 600 years and were thus coeval with the Tongan state (Clark and Martinsson-Wallin 2007). The construction of chiefly mounds most likely results from interaction and a shared belief among elites about how political status should be architecturally materialized. On 'Uvea the largest prehistoric mound is made of basalt stones and is associated with the *Kalafilia* title of Tongan origin (Burrows 1937; Sand 2008), the Pulemelei mound in Samoa (17,000 m^3) also has potential links with Tonga, and, on Rotuma, the Risunu mound is located in an area that traditionally was first settled by Tongans (Clark and Martinsson-Wallin 2007). How chiefly status was expressed prior to mound building is uncertain, with house size and type, along with material culture items potentially signalling rank and authority. The rapidity with which mound building was taken up in Fiji–West Polynesia, probably *c.*1100–1200 CE, suggests that long-distance interaction was increasing and presumably this is linked to the economic and political benefits that elites derived from organized voyaging.

Beyond chiefly mounds there is also evidence for the production of high-status standardized goods. One of the most intriguing material culture distributions in the prehistoric Pacific is that of stone adzes made in fine-grained Samoan basalt. Such adzes occur on islands spread over 5,000 km of the Pacific Ocean, with tools from workshops on Tutuila widely esteemed for the high-quality basalt and artisanal skill involved in their production. Recent work on adze production sites on Tutuila Island has identified the emergence of nucleated workshops specializing in the production of basalt tools *c.*1200 AD. It is hypothesized that craft specialization was linked to increasing social complexity in Samoa (Winterhoff 2007), which may well be associated with widespread interaction and polity formation in Tonga. Stone tools from Tutuila and Samoa make up a significant proportion of the non-local tools at Mu'a and also occur in east Fiji, 'Uvea, Rotuma, Tuvalu, Tokelau and Tikopia, where a Tongan presence has been identified archaeologically or has been recorded in traditional history (Clark *et al.* 2014).

Unevenness

Unequal power relations in the Tongan state are expressed by the unique monumental centre of Mu'a and also by a massive fortification in Fiji. The fortification, known as Ulunikoro, is located on a limestone plateau on Lakeba, the main island of the Lau Group in east Fiji. Archaeological investigations by Simon Best (1984) revealed two phases of occupation at Ulunikoro, with the oldest dated to 1100–1200 CE and reuse, particularly of the highest parts of the site, evident around 1500 CE. The fort contains beach rock slab graves typical of Tongan burials and stone tools from Samoa. Significantly, a piece of obsidian from Ulunikoro that was not able to be identified in the 1980s was recently re-analysed and sourced to northern Tonga, suggesting a Tongan presence at the site (Reepmeyer and Clark 2010). Best had previously hypothesized that Ulunikoro was a Tongan outpost because of its abrupt appearance and size which would have: '. . . required an [centralized] authority which could control, and direct the resources of the whole islands' (1984: 657–58).

Homogenization

One of the most significant ways of making the ‘foreign’ local is for an intrusive hegemonic culture to rename the landscape. Such name changes imply ownership and control over the foreign environment and the indigenous people, and the new names tend to recapitulate the political geography and structures of the colonizers. On Rotuma, linguistic analysis has shown that Tongan loanwords are prominent in semantic fields concerning chiefly titles and terms relating to centralized government and stratified society (Schmidt 2003). ‘Uvea shares significant place names with the Tongan state and the island is divided into the districts of Hihifo, Hahake and Mu’a, named after the main districts on Tongatapu where the Tongan state was located (Figure 4.2.1; Burrows 1937; Clark 2010). More than 30 per cent of ‘Uvean place names are shared with Tonga, which points to an intrusive Tongan presence that Sand (2008: 104) has described as representing a ‘formidable cultural revolution’. Symbols of the Tongan chiefly hierarchy include the chiefly sport of pigeon snaring (Tonga, Futuna, ‘Uvea, Samoa) and use of the prefix ‘Tu’i’ to identify a high chief with a semi-divine bloodline (Tonga, east Fiji, ‘Uvea, Samoa, Tokelau). The proto-Polynesia term ‘Sau’ (secular leader), Tongan cognate ‘Hau’, is also widespread in Fiji–West Polynesia and may extend to Micronesia where the Lord of Deleur at the monumental site of Nan Madol on Pohnpei was known as the *Sau-deluer*.

Cultural homogenization is seldom a totalizing process, as shown by the variation in Tongan influence found in different island groups, yet there appears to have been a strong intent to introduce the Tongan system of political hierarchy on many islands that goes far beyond the relationships necessary for economic exchange.

Heterogeneity

The fusion of people from different islands, but under Tongan control, is an expected outcome of state expansion and likely occurred in east Fiji, where archaeological artefacts from the Ulunikoro fortification include lithics from Samoa, northern Tonga, Vanuabalavu and Viti Levu (Rewa Delta) and ceramics from several parts of Fiji including the Lau Group and Viti Levu. The diversity of stone and pottery sources in the fortification is the greatest in Lakeba’s 3,000 year history, and the association of artefacts from diverse sources with the oldest fortified site in Fiji–West Polynesia points to the possibility that Tongans were attempting to control access to important chiefly goods such as large double canoes and highly prized red feathers. Interestingly, Tutuila in Samoa, which produced high-quality stone adzes, has a tradition of Tongan occupation that was repulsed by the local chief Fua’au (Krämer 1994: 343), suggesting that at one time Tongans may have tried to control adze supply in Samoa. Interaction with Fiji provided pottery, dogs and bark cloth, while Samoa produced fine mats and high-quality stone adzes all of which increased cultural heterogeneity in Tonga, especially among the elites (see also Clunie 2013).

Re-embedding of local culture

The restriction of Tongan fortifications to the southern part of ‘Uvea shows that local lineages in the north of the island opposed Tongan influence, just as there was resistance in east Fiji. Tongan ‘domination’ was almost certainly contested to some degree everywhere it was asserted, a fact also evident from the expulsion of the twelfth Tu’i Tonga Talakaifaiki, who in both Tongan and Samoan traditions is claimed to have been the last Tongan ruler of Samoa (*c.*1350–1400 CE).

Re-embedding of the local is also seen in multiple versions of traditional history, as in Tikopia where the Tongan origin story about the discovery of kava (*Piper methysticum*) is given alongside a version in which Tikopia is the source (Luders 1996; Feinberg 1998), and on 'Uvea where Tongan domination by the twenty-fourth TT Kau'ulufonufekai is recast as an event that granted 'Uvea independence from Tongan rule (Sand 2008: 103). Returning to local traditions is, of course, a common response by subordinate groups to foreign or internal groups who attempt hegemonic control. Re-embedding is probably best thought of as an expected outcome of culture-contact rather than a marker of globalization. However, re-embedding is a common response to 'homogenization', which is closely associated with colonial power structures that frequently derive from societies with globalizing tendencies.

Vulnerability

Structural vulnerability in the political system of Tonga is, in part, a function of increasing societal complexity through collateral lineage segmentation that diffused power and authority among an increasing number of chiefs (Figure 4.2.2). The unanticipated consequences of lineage splitting were, first, an increase in the number of chiefly titles and positions that inevitably increased political competition; second, the progressive removal of the Tu'i Tonga from government decision-making, which created a political void; and third, the creation of paramount chiefs who were able to forge local power bases that in many respects began to function for much of the time as independent chiefdoms.

How might political 'vulnerability' and the decline of the Tu'i Tonga system be identified? An indication of the power of Tongan paramounts is the amount of stone used in the monumental chiefly tombs. Carbonate slabs had to be quarried with stone tools from beach areas on Tongatapu or from nearby offshore islands and transported by hauling/canoe to Mu'a before being set in foundation trenches. The labour and transport costs are difficult to estimate, but tomb construction was an expensive enterprise as large slabs could weigh 10 tons or more and hundreds of slabs were required to build the largest tombs. The TT Pau in 1777 CE had already built the last of the large 'royal' tombs for his father Tu'i Pulotu II sometime after 1750 CE. This tomb is an elevated earth mound with a single perimeter of beach rock facing on the mound top, the stonework having an estimated weight of about 40 tons. The amount of stone is much less than that used in any of the other 'royal' tombs, which all contain well over 100 tons of stone (Figure 4.2.4). If the size and amount of stonework in a tomb represents the resources of the Tu'i Tonga, particularly those contributed by junior chiefly lines related to the TT, then the presumption must be that collateral lineages were already pursuing their own interests political prior to the arrival of Captain Cook.

Collapse and chaotic interaction

As a regional power experienced in dealing with other cultures and incorporating new items and ideas, the Tonga state should have been well placed to survive the impacts of globalization heralded by an increasing Euro-American presence in the central Pacific. Like many Pacific islands, Tonga experienced warfare, demographic collapse and the extermination of traditional government. Political failure occurred during a phase of population decline, raising an important question about the significance of high rates of mortality on traditional leadership.

The earliest and least referenced estimate of Tonga's population was made by Johann Forster (1788: 223, 225), who thought there were 200,000 people in the archipelago, but later assessments noted a much smaller population of less than 40,000 people. The combined effects of

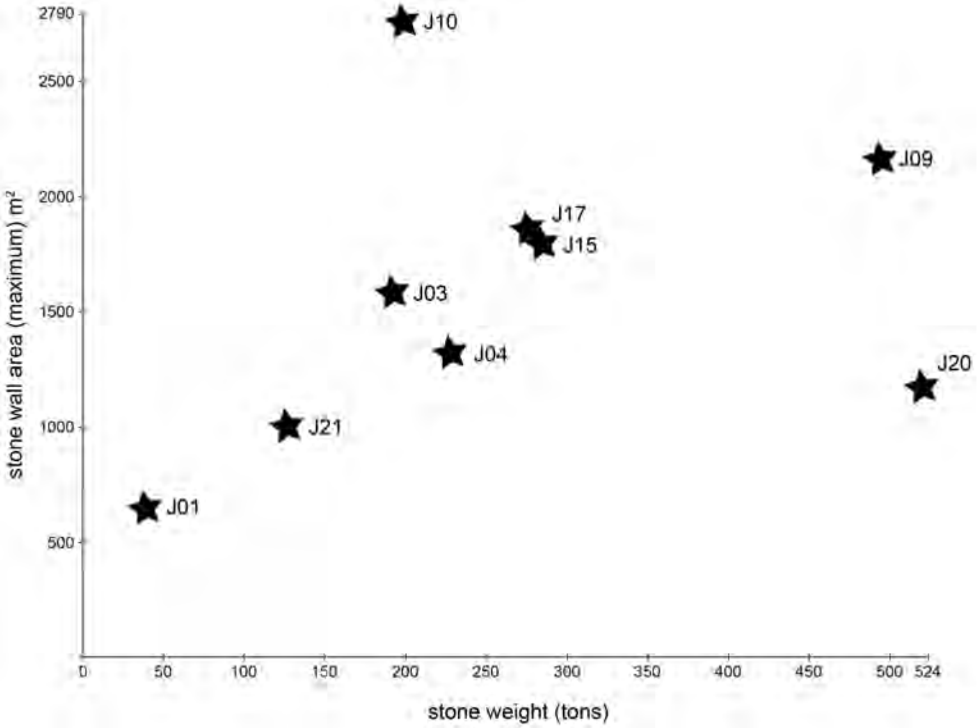

Figure 4.2.4 Plot showing the relationship between the amount of stone used in the nine largest tombs at Mu'a/Lapaha and the area enclosed by the basal stone-slab walls. The last of the major tombs to be built at Lapaha was J01 (Tuoteau) which has the smallest weight of stone and the smallest tomb area. The J01 tomb was built by the 36th Tu'i Tonga Pau who met with Captain Cook in 1777 CE. Stone weight is estimated from individual slab length and thickness dimensions with height calculated by measuring the above ground height of slabs and adding one third to the height value to account for the buried portion of a slab. Test excavations suggest that many slabs were deeply buried and have more than one-third of their total height below ground surface indicating that estimated stone weights may underestimate the amount of stone used in the tombs

warfare, famine and introduced disease were thought by the demographer McArthur (1967: 96) to have had relatively little effect on Tonga's population after 1799 CE because sporadic communication between islands would have restricted the spread of epidemics within Tonga, while a high rate of emigration to Fiji potentially preserved a significant portion of the population. There is a significant contradiction between the two propositions regarding Tongan canoe voyaging that suggests that McArthur may have underestimated the impact of introduced diseases in Tonga.

Maude (in Green 1973: 72) calculated a population decrease of ~ 37 per cent, based on a precontact population of 29,700 people and an 1840 CE estimate of 18,500 people. Uncertainty in population estimates given in historical sources is significant, with both Thomson (1894: 372) and Wood (1943: 90) adamant that the total population of Tonga never exceeded 20,000–25,000 people, while long-serving missionaries such as Thomas (Statham 2013: 356) said there were more than 40,000 people in 1838 CE and Lawry estimated about 50,000 people (Lawry and Hoole 1850: 245). Green (1973) calculated the population size from agricultural carrying capacity to suggest that by 1891 CE, and perhaps as early as 1852 CE, the Tongan population had suffered a decline of 44–50 per cent, with a pre-contact population of ~ 16,000± 1,000 people on Tongatapu and a total population for Tonga of 37,000. William Anderson in 1777 CE thought that about two-thirds of Tongatapu was in the 'highest state of cultivation' (Beaglehole 1967b: 934) and Green (1973: 72) also estimated that 50–70 per cent of the island was cultivated prior to European arrival. Kirch (1984: 98) calculated a total population of 40,000, similar to Green (1973), and Burley (2007: 186) estimated a population size of 34,223 people. Spennemann (1989: 266) summarized historical and derived records of Tongatapu's population (pre-1777 CE to 1891 CE) that range from a low of 7162–8454 people recorded in the 1891 census to an estimated 34,800 people in 1824 CE. Assuming a 60 per cent level of land use and a saltwater food component of 10 per cent, Spennemann (1989: 271) calculated a population size of 12,200–25,000 people for pre-contact Tongatapu that, if accurate, implies a mortality rate of 31–69% using the 1891 population mean (7,808 people).

In the wider context, mortality rates of 50 per cent or more accompanied European arrival in several parts of the world including North America, Mexico (equivalent to 80 per cent) and South America (equivalent to 50–90 per cent) (Acuna-Soto *et al.* 2002; O'Fallon and Fehren-Schmitz 2011; Hamilton *et al.* 2014). On several Pacific Islands population decreases of ~ 90 per cent have been proposed for Hawaii, Marquesas, Aneityum and Tahiti, and are possible in New Caledonia (Bushnell 1993; Spriggs 2007; Rallu 2007, Sand *et al.* 2007). Population declines in Tonga may well have been greater than previously thought, due to frequent canoe voyaging between islands that allowed the transmission of epidemics in the archipelago. A major epidemic (Yellow Fever?) was recorded at around 1811 CE that was brought to Ha'apai by two canoes from Fiji, while missionaries from Samoa brought influenza to Vava'u in 1839 CE, demonstrating that inter-island canoe travel could introduce high-mortality diseases. A detailed study of missionary records would provide useful baseline data to track the type, frequency and severity of introduced diseases and epidemics in Tonga, but a brief survey (Table 4.2.1) indicates

Tables 4.2.1 Disease and epidemics in Tonga 1773–1918 BCE

	Date	*Location*	*Disease*	*Description*
1	1773–1774	Tongatapu	Venereal disease, ?consumption	'They complained of the Venereal disease. I heard some coughing very hard and saw a few in an apparent consumption.'
2	1777	Ha'apai	?	'Several Canoes came from the different islands to barter . . . and we observed that almost all of them as well as the inhabitants of Kotoo [Kotu] were affected by a violent cough.'
3	1777	Tongatapu	Venereal disease	'I believe the most destructive is a European one introduc'd amongst them probably by the ships that visited them in 1773, which has already begun to make fatal ravages amongst them.'
4	1797–1799	Tongatapu	Dysentery, ?small pox, venereal disease	'The disorders which have principally come under our observation are, a dysentery, of which the person is recovered . . . a disorder among the children, which spreads all over them like the small pox, and seems of as loathsome but more inveterate.'

5	1797–1799	Tongatapu	?	‘there was an epidemic disease at the time, which was very fatal among the chiefs’.
6	1811	Tonga Group	?Yellow fever	‘many of Haapai people were seized with it, and suffered greatly in the head, and some in their bowls, and many died . . . it swept through every part of the land, and hundreds were carried off, and some great chiefs died, as Mougaotubou, the wife of the King, and her father Tongamana and the ex-Moheofo Tubouveiongo; it raged fearfully both at Haabai and Tonga: at length it subsided, and the people who survived by slow degrees recovered their strength . . . in a short time the people of Vava’u were seized with the complaint . . . it raged fearfully there, as at the other islands, and some hundreds must have died and many of the chiefs die here’.
7	1829	Tongatapu	?	‘Cap. Deans, having an English Surgeon with him, which seems very providential, as we have great affliction amongst the natives, also in the mission families.’
8	1830	Tongatapu	Dysentery	‘Still we observed large portions of land lying waste, the present number of inhabitants not requiring them; . . . their frequent wars, combined with successive attacks of dysentery and other diseases, had so fearfully reduced the population.’
9	1832	Tongatapu	?	‘considerable affiction in the island’.
10	1835	Tongatapu	?	‘As we have an epidemic raging at this time, many of our most ardent friends are not with us.’
11	1839	Tonga Group	Influenza	‘News from Tonga is that the influenza has carried off many persons there, and some heathen chiefs have died.’
12	1893	Tonga Group	Measles	‘devastating epidemic of measles one-twentieth of the population was carried off, and the remainder was so demoralized that it was threatened with famine’.
13	1918	Tonga Group	Influenza	4.2–8.4% of Tongan population killed by influenza pandemic

Note: 1. Hoare 1982: 402, 2. Beaglehole 1967b: 884, 3. Beaglehole 1967b: 927, 4. Wilson 1799: 258, 5. Martin 1991: 67, 6–7. Thomas in Statham 2013, 8. Williams 1837: 308, 9–11. Thomas in Statham 2013, 12. Thomson in McArthur 1967: 76, 13. Wilson *et al.* 2005. The severity of venereal syphilis in Tonga is difficult to evaluate because the disease can be confused with yaws which is epidemic in the Pacific and which appears to confer a degree of immunity to syphilis (Smith 1975).

that McArthur (1967) has probably underestimated mortality rates on Tonga, which may have exceeded 50 per cent. This is plausible because demographers have not been able to consider the impact of diseases introduced prior to 1799 CE by direct contact with Europeans as well as infections contracted from other islands that were visited by Europeans and Tongans and brought to Tonga, and only a portion of the historical sources have been utilized to examine mortality and sterility in Tonga during the European contact period.

The effect of high mortality on the political system of Tonga was almost certainly a crucial factor in the social collapse and demise of the Tu’i Tonga chiefdom, which facilitated the reconstitution of a centralized polity under a new constitutional monarchy. The paramount chiefs of Tonga were responsible for ensuring the health and prosperity of the people which involved managing agriculture and conducting the great *inasi* ceremony. The populace in return had to obey the chiefs and act appropriately toward the gods. The paramount chiefs had the ability to cure illness and disease as a result of their semi-divine origins (Samwell in Beaglehole 1967b: 1034).

Disease, injury and death in Tonga were the direct result of not meeting traditional obligations: 'founded in their firm and fixed belief, that all human miseries are the consequent punishment of crimes, and that acts of atrocity are most frequently punished by disease and death' (Martin 1991: 306). A high death rate weakened the Tongan state by demonstrating that both the chiefly elites and the traditional gods were unable to look after the common people (nor the chiefs themselves, see Table 4.2.1) at the same time that Christian missionaries were offering a new non-elite religion and showing its power through the efficacy of foreign medicines.

In effect, each death by disease and epidemic undermined the traditional system, while each successful recovery attributed to the medicines or beliefs of the missionaries strengthened the new religion. The connection between medical treatment, particularly of chiefs, and indigenous support for Christianity was clearly recognized by the missionaries (see also Latukefu 1969, 1977):

> its [medicine] skilful and successful application is one of the best means of gaining influence among the people and predisposing them to regard with favour his endeavours to direct their minds to the heavenly Physician.
>
> *(Ellis 1844: 159)*

> Our success in this respect [administering medicine] has been the means of bringing many over to our cause from different parts of the island. When a cure has been wrought . . . the whole family, and in some instances, families have come over to live at Nuku'alofa, and attend religious instruction.
>
> *(Turner in Latukefu 1977: 124)*

The breakdown of central authority on Tongatapu, particularly from the rapid loss of the traditional belief system due to high mortality in tandem with the presence of a new religious ideology, had two significant effects on interaction. First was a rise in chiefly competition as elites sought to maintain or elevate their position through the use of traditional valuables that formerly were reserved for the paramounts. As junior chiefs were often responsible for obtaining these items, they were able to use status goods for themselves or could supply such goods to a political faction as the state fragmented. A major impact of polity disintegration was that the material symbols of high rank were freed up and used by a much larger number of competing chiefs, which increased the demand for exotic/chiefly items such as sandalwood, red feathers and large canoes. Archaeologically, evidence for the decline of the centralized political system should be seen in the presence of high-status exotic items among a broad sector of the chiefly strata, and also by elite architecture and chiefly material culture in places distant from the state centre. The former is supported by historical accounts of Tongan interaction in the nineteenth century (Clark 2002; Clark and Martinsson-Wallin 2007).

Second, the outflow of people from the Tongan islands due to warfare, disease and famine was accompanied by trade and exchange opportunities that had been constrained by the centralized system. Tonga was visited by Europeans more frequently than either Fiji or Samoa in the late eighteenth century, and Tongans initially supplied these islands with iron and other introduced products. For example, the first iron tool was brought to Fiji by a Tongan chief, and

Tongans began to produce worked whale teeth and inlaid clubs using iron tools and collected white cowrie shells which were chiefly valuables in Fiji, as well as using European products to purchase Fijian red parrot feathers (Williams 1982: 94). Iron tools allowed voyaging canoes to be built more rapidly and in larger sizes than was possible with stone tools, increasing the frequency of inter-archipelago voyaging. Decentralized or 'chaotic' interaction is also evidenced by groups of Tongans involved in opportunistic raiding and warfare in several parts of the central Pacific, particularly Fiji, and at the other end of the spectrum by Tongan converts taking Christianity to other islands, both of which established a Tongan presence and often migrant communities abroad. In short, the Tongan diaspora and interaction in the first half of the nineteenth century was the result of state collapse – hastened by European contact – and is a poor analogue for understanding interaction in the centralized Tongan polity.

Conclusion

Archaeological investigations have shown that stone tools associated with the tombs of the ruling Tu'i Tonga lineage come from locations outside the archipelago and because the kinspeople of the paramount were traditionally involved in his funerary activity, it is likely that these exotic tools represent the biosocial networks of elites during the period of political centralization. Beyond the urban monumental core of the elites at Mu'a there is evidence that the Tongan polity had a significant influence in east Fiji, 'Uvea, Rotuma and Samoa and that there was likely Tongan contact with Vanuatu, west Fiji, Pohnpei, Futuna, Tokelau, Tikopia, Anuta, Tuvalu and Kiribati. Trying to partition the variability of Tongan influence within a 'core–periphery' or 'empire' structure with sparse archaeological data is not currently feasible, nor is an in-depth understanding of the effects of culture contact on the Tongan state. Instead, the globalization criteria of Jennings (2011, this volume) offer an appropriate framework for considering the unique maritime state, the political workings of its elites and the vulnerability of the Tongan system to internal and external challenges. For instance, the progressive removal of the paramount Tu'i Tonga line from practical government by collateral lineage segmentation created a political void that allowed junior chiefly lines to develop a degree of regional independence. It seems likely that had Europeans not arrived in Tonga, political change would have taken place through traditional mechanisms such as lineage absorption by strategic marriage leading to the resumption of a centralized state under a single sacred-secular paramount.

It has been argued that in Tonga, as was the case in much of Oceania, the political and religious spheres were inseparable, with the political and social hierarchy legitimized by the efficacy of the gods and paramount chiefs in maintaining the well-being of the people. Population collapse from warfare, and particularly the arrival of introduced diseases, was an essential factor in the breakdown of chiefly control, the adoption of Christianity and its political cognate the constitutional monarchy. From a 'globalizations' perspective, social collapse can be interpreted as the reorientation of Tongan society toward the newly experienced global cultures represented by the arrival of ships from Euro-American hegemonic cores.

As the most expansive and powerful maritime society in the central Pacific, the appearance of a few Europeans ships likely elicited little concern from Tongan leaders who could not have predicted how quickly traditional systems would be undermined by economic, ideological and biological imports. A chaotic phase of decentralized interaction that was not controlled by traditional elites was a response to the opportunities created by polity disintegration on the one hand and the maritime ability of Tongans to export European goods, ideas and beliefs to other Pacific islands on the other. Ultimately, these hybrid networks failed, but they signal engagement with international societies and suggest that prehistoric polities with a similar interaction history might also have been responding to new hegemonic powers, whose arrival and influence are key drivers of the expansive interactions among complex societies that are a defining feature of globalization.

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4.3

Australian lithic technology

Evolution, dispersion and connectivity

Peter Hiscock and Tim Maloney

Introduction

In this chapter we explore directionality and scale in social connectivity within the Antipodes. We do this through an examination of archaeological evidence for the growth of prehistoric globalization and the longevity of massive systems. Here we are concerned with social and economic connectedness; an interest in globalization as increased economic and social integration and inter-connectivity of communities across geographically large and varied areas (see Hodos 2010; Jennings 2011, this volume; Stek 2014; Tomlinson 1999; Versluys 2014; Feinman this volume; Knappett this volume). Our target in this chapter is to infer the scale of trends towards globalization of technology within prehistoric Australia.

Technological change in Australia has varied in rate and mode. Some elements of these changes reflect responses to palaeoenvironmental change while others are articulated to shifts in the relationships between people. Mapping technological patterns onto proxies of either environment or social connections is a complex job but there is emerging evidence that both clarifies and challenges interpretations of lithic technologies across Sahul. In this chapter we synthesize evidence for some of the lithic production practices across Australia during the terminal Pleistocene and Holocene, and explore the social and economic dynamics that are associated with those practices.

Our analysis focusses on three kinds of artefacts, their production, distribution, history and evolutionary context. Backed artefacts, bifacial points and edge-ground axes are distinctive, widely spread and display remarkably parallel patterns of chronological change. Examples are shown in Figure 4.3.1. We define each category as follows:

- *Backed artefacts* are flakes characterized by steep, usually bi-directional and bipolar retouch along one lateral margin, creating specimens with one blunted (or partially blunted) lateral edge and one low-angled unretouched lateral edge. Backed artefacts may be large or small, pointed or rounded, symmetrical or asymmetrical, and made on many kinds of stone; their only necessary character is backing.
- *Bifacial points* are flakes retouched along one or both lateral margins and on both faces, and on which the lateral margins converge. The extent of retouch is variable around the

margins; point tips are usually shaped by retouch although butts are retouched on some specimens but not others. Invasiveness of retouch also varies between specimens and regions, with some being shaped extensively by invasive retouch and others by almost exclusively marginal retouch. Our concern in this chapter is the class of bifacial points, irrespective of the refinement of production and the precise pattern of retouching.

- *Australian axes* typically have one bevel ground on both faces. Usually this is a slightly curved bevel positioned at the end of the long axis. Some axes are made on flakes, others on cores. Prior to grinding the edge, some specimens are shaped by flaking, others by dressing (i.e. pounding), some by both flaking and dressing, and others are not shaped prior to grinding. The extent and orientation varies, and there are probably artefacts that function as axes without ground edges, but our discussion is limited to specimens with ground bevels irrespective of shape or manufacturing procedures.

Each of these forms is morphologically distinctive, often made on different materials and with different production and functional characteristics. And yet they all display similar evolutionary trajectories, with an increase in deposition and expansion of distribution following long after the initial adoption of the technological procedures. We know that many of the specimens were

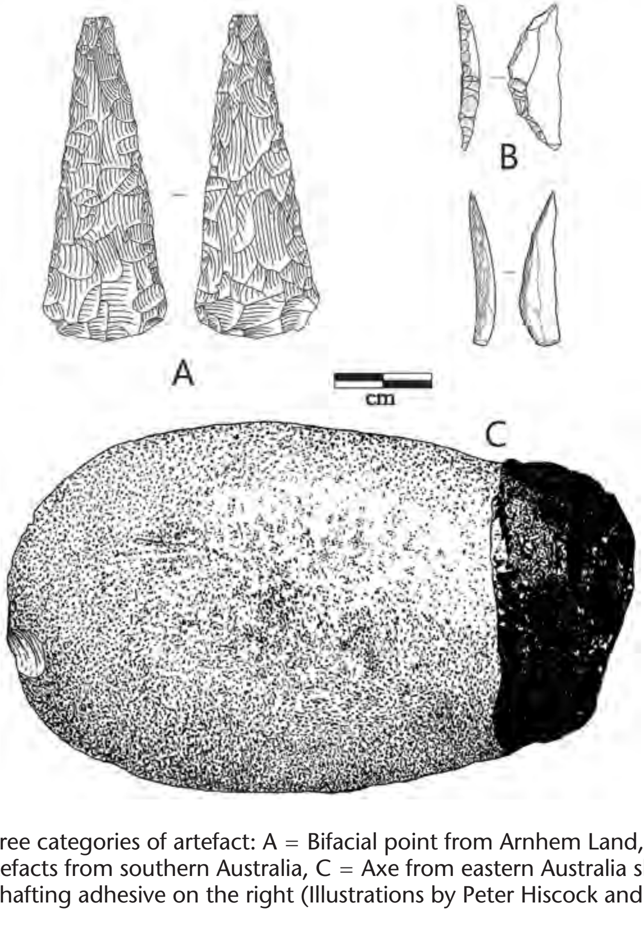

Figure 4.3.1 Three categories of artefact: A = Bifacial point from Arnhem Land, B = Backed artefacts from southern Australia, C = Axe from eastern Australia showing residue of hafting adhesive on the right (Illustrations by Peter Hiscock and Chris Clarkson)

used as tools, and yet it is also clear that the objects carried social meaning. After discussing the nature of difference between these artefact categories and the technological strategies that created them, we will explore their operation and the environmental and social contexts in which they were situated. Our goal is to develop statements of the relationships between these technological changes and the scale of cultural networks across and beyond Australia.

Class boundaries and behavioural meaning in Australian implement forms

The initial issue to be explored concerns the distinctiveness and nature of these three kinds of artefacts. Each group displays morphological variation across its geographical range, and through its manufacturing history and lifecycle. The long-standing question is whether within this variation there are distinct and separable forms or whether we are observing continuums that cannot be non-arbitrarily sub-divided. Our view is that the three categories we discuss here are in most regions and periods clearly distinguishable, both morphologically and in their operation within the human cultural system. Within each of the three classes there is variation that may be continuous and is more difficult to sub-divide.

Perceived ambiguities in establishing different high-level categories were reflected in twentieth century confusions, created by typological classifications, which employed shape alone rather than production processes to understand relationships. The result was the division of very similar things, made in the same way, into different categories based on subtle distinctions in shape. Hence small symmetrical backed artefacts were once classified as *microliths*, small asymmetrical backed artefacts as *Bondi Points*, and large asymmetrical backed artefacts as *Juan Knives* (McCarthy *et al.* 1946; Mulvaney 1969: 123–26). More recently, these specimens are all considered as part of a single variable class of backed artefacts (Hiscock 2014a). Additionally, large backed specimens from northwestern Australia were originally labelled as 'backed points' because they were asymmetrical and pointed and existed in assemblages that had unambiguous bifaces (Dortch 1977: 117; O'Connor 1999: 72). It has now been observed that while these specimens are made on the same blank forms as many points, they are manufactured in a distinctly different way, with bipolar anvil rested retouch (Maloney and O'Connor 2014). Such specimens could be considered to be backed artefacts on technical grounds. These confusions, and revisions, reflect the concerns of classifiers and do not indicate continuous variation in technology or artefact morphology.

Several strands of information indicate that these three classes are distinctive and discrete, while they contain variation that may be morphologically continuous. Metrical studies of artefact morphology indicate that these forms are distinguishable and that they can be reproduced with statistical clustering methods. This is particularly true of the backed artefact class, which has been subject to detailed morpho-metric analysis (Hiscock and Attenbrow 2005). Morphological differences between backed artefacts and other retouched flakes in eastern Australia reflect different blank production, different flake selection, and different retouch techniques and sequences (Hiscock 2003; Hiscock and Attenbrow 2005). These different treatments represent a different manufacturing history for specimens in each of the classes, creating the morphological differences that archaeologists find.

Compelling evidence for the separate morphology and technological history of each class comes from detailed studies of archaeological assemblages in regions where the forms coexist in large numbers. One of the most useful case studies comes from Lawn Hill in northwest Queensland, where Hiscock (1988, 1994b, 2005, 2007) presented production and distributional data on each form. The artefact classes were made of different materials: backed artefacts on chert, points on greywacke, and axes on exotic metabasalt. These materials had different physical properties and came in nodules of dissimilar sizes and shapes. Each artefact class was manufactured in a different way, using distinct flake blanks: backed artefacts from small, flat flakes with sub-parallel margins taken off small rotated cores and burinates; bifacial points from larger, thicker, broader and more convergent flakes taken from large single platform cores; and axes from very large, often hinge-terminated, flakes struck from massive rotated cores. The production and life history of each class was distinct. Backed artefacts were retouched with a bipolar technique, but once manufactured did not appear to undergo further modification. Points were invasively flaked by low-angled percussion blows, first on the dorsal face and then on the ventral, and were repeatedly modified as they were carried around the landscape for use. Axes were often unifacially flaked and then ground at the distal end, being reworked as they were extensively transported, damaged during use, repaired and re-hafted. Hence each artefact category is the product of different manufacturing treatments, reduction trajectories and technological strategies.

The nature of strategies can be partly understood in terms of the extendibility continuum described by Hiscock (2006). This formulates relationships between stoneworking and conservation of stone material, by thinking of the ways knappers might maximize the utility of their artefacts (Figure 4.3.2, panel A). At one end of a continuum of options are *extension* strategies that seek to prolong the usefulness of the lithic artefact at hand, thereby reducing the rate at which new rock needed to be resupplied while at the same time keeping artefacts in a ready state. This involves extending the use-life of a tool by flaking, using and resharpening each item, and configuring the artefact so that repeated maintenance or recycling is expedited. Maintenance activities were often facilitated by creating larger items from which mass could be expended in flaking, and such artefacts are rarely highly standardized because of the ongoing alterations they receive. At the other end of this strategic continuum are *abundance* strategies, in which a relatively large number of specimens is produced per unit stone, providing the capacity to use several specimens at once and/or to regularly and cost effectively replace specimens. In this approach benefit is obtained by increasing the number of artefacts available for use, an outcome facilitated by manufacturing smaller artefacts. Such artefacts have less capacity for extended maintenance, but composite tool use could be prolonged through the replacement of exhausted specimens with fresh ones. This process is enhanced if specimens are of similar dimensions, and so standardization of artefact sizes may accompany abundance strategies.

The extendibility continuum represents a series of non-exclusive strategic choices about how to supply stone tools at acceptable cost, each strategy containing subtly different economic advantages and costs. Technological strategies at both ends of the continuum may enhance the readiness of the toolkit, although the nature of toolkit operation must be different at either end of the continuum.

Australian implements can be plotted along the continuum (Figure 4.3.2, panel B). Measures of both production rate and reduction potential were provided by Hiscock (2006), drawn from independent technological studies of manufacturing processes (Dickson 1981; Hiscock 1993, Hiscock 1994b). Production rate is the number of specimens per kilogram and weight is the simple proxy of reduction potential (see Hiscock 2006). Very few axes were produced per unit of stone, with substantially more points, and a very high number of southern backed artefacts. Axes have very high mass and hence high capacity for reduction, points have a medium capacity, and backed artefacts a relatively low capacity.

While the positioning of the three artefact forms on this representation of the continuum is congruent with data, the situation is complex. These measures do not express the different ways each kind of object can be reworked, and it is likely that the reduction potential of bifacial

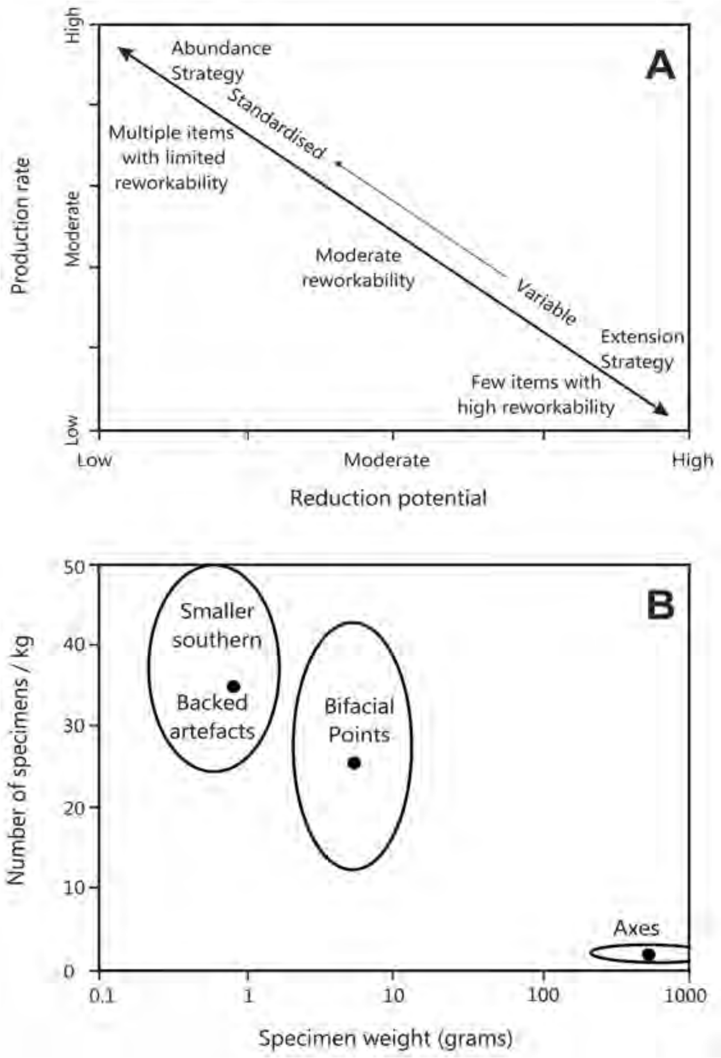

Figure 4.3.2 Model of the extension-abundance continuum (after Hiscock 2006). A = Continuum of possible artefact forms that play off reduction potential against production cost/rate. B = Plot of backed artefacts, bifacial points, and axes on the continuum using proxies for reduction potential (specimen weight) and production rate (number of specimens per kilogram). Dots indicate the central tendency (arithmetic mean) of each class, and an ellipse indicates variation exists (standard deviation)

points in particular is somewhat underestimated. Additionally, there are variants of backed artefacts that overlap with points in production rate and size. This is the case with large asymmetrical backed artefacts found in the northeast of Australia (Lamb 2011) and the large backed 'points' in northwestern Australia (Maloney and O'Connor 2014). These were made on flakes the same size as large points, while having the same shape and production process as the small backed artefacts. In some ways these variants represent morphological intermediates between small backed artefacts and bifacial points. On a continental scale, the characteristics and roles of these categories were more diverse than is found in any one region. Consequently, patterns discussed here are indicative and typical without necessarily representing all aspects of patterns that changed across space and over time. We summarize the known histories and interpretations of these technological systems as follows.

Australian backed artefacts

In Australia, archaeologists adopt the term 'backed artefacts' to redefine the category elsewhere labelled *microlith*. The distinguishing feature of backed artefacts is the near ninety-degree retouch, usually accomplished with bipolar techniques on anvils. The size of backed artefacts varies considerably between regions and in some places they are large, hence they are not always microliths in the Australian context. Redefining the phenomena in terms of backing that blunted an edge creates a useful image of this technological system in Australia (Hiscock in press).

Backed artefacts are absent from Tasmania and display clear geographical variation across the Australian mainland. They are not found in the northern portions of central and Western Australia. Across the rest of the mainland they are found in varying densities, with regionally different sizes, shapes and production systems. An index of symmetry records higher values for more symmetrical specimens and lower values for less symmetrical. Asymmetry is more typical on continental margins (Figure 4.3.3). This geographical variation in backed artefact morphology is hypothesized to reflect dispersal history for the artefact class, modification of morphology arising from transmission error, technological adjustments to different blank production strategies, and divergence in the backed forms to facilitate social signalling in learning/production contexts (see Hiscock 2014b).

At any one location backed artefacts are often uniform in size and shape. The process of creating standardized forms was sometimes assisted by the production of flakes with regular shapes, but it did not depend on standardized blanks. Specimens were made on any flake that had an appropriate cross-section and one straight or gently undulating margin of sufficient length (Hiscock and Attenbrow 1996; Hiscock 2006). This means that prehistoric manufacturing did not involve mechanically applying a fixed procedure to a uniform blank, but required the artisan to select a suitable section of each flake to retouch. Standardization was then achieved by careful retouching of flakes on an anvil.

Backed artefact production typically involved considerable investment. In some regions we know that high levels of backed artefact manufacture were associated with the procurement of 'higher quality' local lithic materials, reflecting a restructuring of economic activities. Knappers also improved material responsiveness by subjecting the rock to controlled thermal alteration. Heat treatment was often undertaken late in the production process, when the specimens were smaller, so that application of heat had a higher chance of successfully improving fracture quality of specimens. Heat-treated pieces of rock were typically knapped with care, and in many instances flake production in preparation for backed artefact manufacture involved regular and precise knapping of small pieces of stone, involving careful platform preparation and structured core reduction. The combination of high investment in materials and regular skilful knapping conserved material by extracting a large number of specimens per unit of stone, and there may have been some degree of craft specialization involved in the organization of production. If the geographically localized patterns of standardized backed artefacts reflect localized craft traditions and practices, then we can hypothesize that those manufacturing systems reflected social structures involved with learning; things like recognized craft specialists or craft contexts and connected apprenticeship learning. The way backed artefacts were used as tools suggests similar mechanisms.

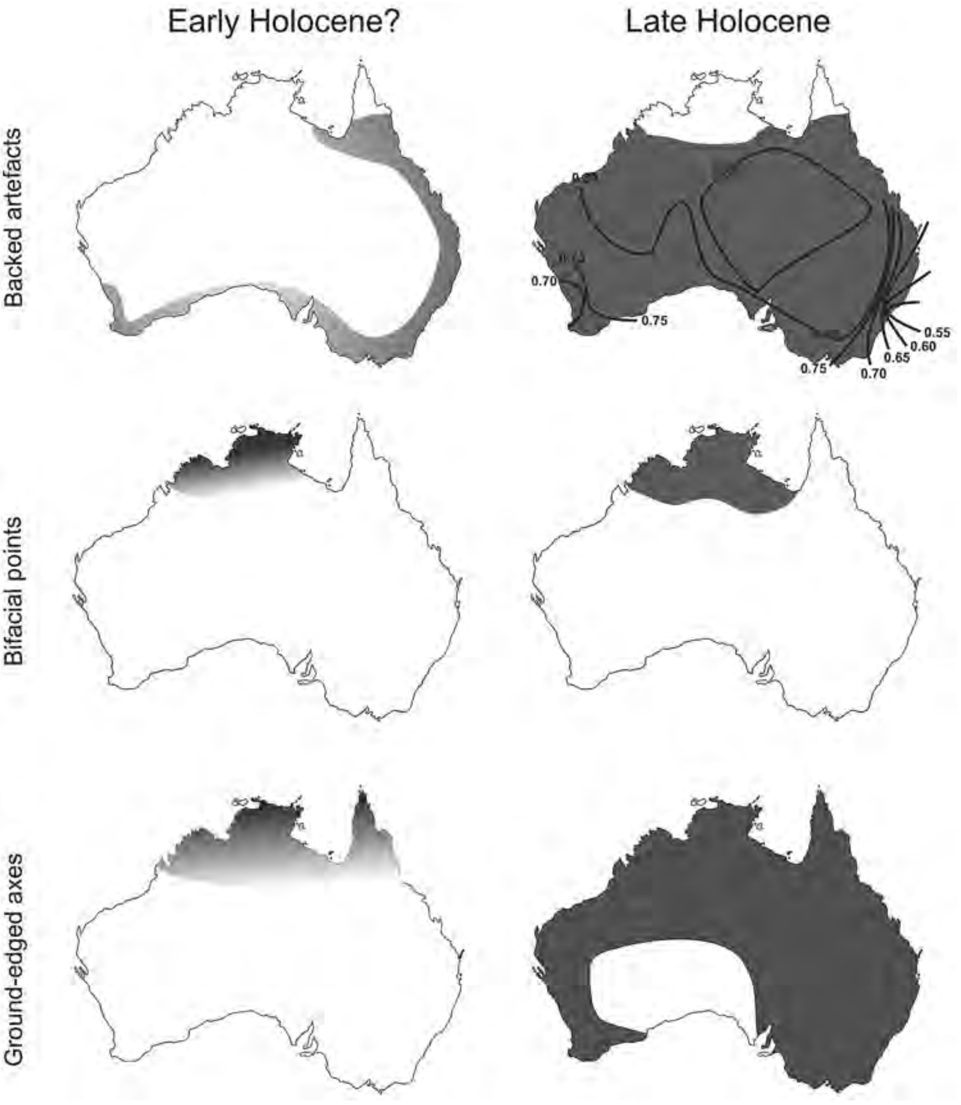

Figure 4.3.3 Distribution of backed artefacts, bifacial points and ground-edge axes across the current Australian mainland (data from various sources; graph drawn by Hiscock). Late Holocene distributions (*c.*3000–1000 BP) are more accurately established than early Holocene distributions (*c.*8000–5000 BP)

Backed artefacts may well have been used as tools held individually in the hand, but there is abundant evidence that many were hafted as parts of composite tools. Resin residues and stains from hafting adhesives have been widely found and suggest that specimens were most commonly positioned with backed edge towards a shaft, and with the sharp chord edge parallel or sub-parallel to the shaft. Residues and stains are concentrated along the backed edge, indicating that specimens were held in place by adhesive compounds packed around them and encircling or partly encircling the shaft. Figure 4.3.4 illustrates some of the possible hafting patterns.

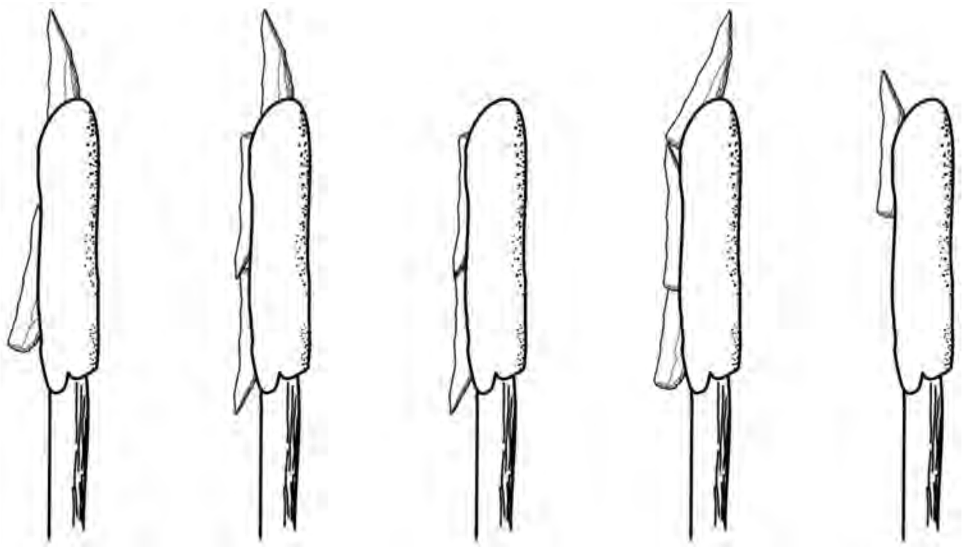

Figure 4.3.4 Idealized images of possible backed artefact hafting positions, inspired by McCarthy's (1976) illustration but excluding those options which are unlikely given existing usewear and residue evidence (after Hiscock in press)

The length of the shaft remains unknown and it has often been presumed to be long, reflecting the widely held proposition that backed artefacts were armatures on spears, either hafted along the shaft as barbs and/or at the tip as projectile points. This use of backed artefacts cannot be entirely ruled out, and one recent review finds projectile armatures are still a plausible hypothesis (Fullagar 2016), but the weight of evidence indicates that at least in the southeast of the continent, backed artefacts were commonly used on short-handled composite craft tools rather than on projectiles.

In southeastern Australia, at places such as Mangrove Creek, use-residue studies reveal that backed artefacts were used for many tasks involving multipurpose cutting and slicing of both plant and animal materials, but rarely as thrown spears (Attenbrow *et al.* 2009; Robertson 2002; Robertson *et al.* 2009). Many specimens have residue or wear patterns, documenting they were used for two or more purposes and indicating that the composite tool on which they were hafted was capable of being employed for diverse craft activities. This evidence compels us to abandon visions of Australian microliths as always being spear armatures, and eliminates explanations that rely on that proposition, such as suggestions that they had been used on spears for game hunting (McBryde 1974; Morwood 1986, 1987), or for intense warfare/violence (Flood 1995; McDonald *et al.* 2007). The early version of Hiscock's (1994a) risk reduction model, which hypothesized that backed artefacts were made in regular shapes to provide easily maintainable spears that would reduce foraging risk in unpredictable environments, is also refuted by this evidence. The functional evidence we have instead reveals that backed artefacts were used to create intricate, sometimes delicate, crafts made from hide, bone, wood, feathers and other materials. These items were scraped, carved, incised and sliced. None have been preserved and so we cannot at this point infer the kinds of craft items being constructed. However Hiscock (in press) has argued that there are two possibilities to consider.

It may be that backed artefacts were being employed as craft tools to make a diverse material culture of directly utilitarian items: clothing, bags, hunting gear such as nets/traps, shelters, bedding, boats, and so on. In that case Hiscock's (1994a) risk reduction model should be reformulated to state that regular-shaped backed artefacts were produced as the edges of critical multi-purpose craft tools, used in making a diverse range of utilitarian tools that acted as a buffer against foraging risk. In this model artisans maintain standardized backed artefact sizes and shapes because the regularity of artefact form assists in the maintenance of the composite tool, which can be kept in a functional state.

Hiscock's (in press) alternative proposition is that some of the craft goods being produced were also employed as social signals, perhaps creating valued items for exchange and/or for use in cultic performances. The evidence that backed artefacts were embedded in composite tools adorned with red ochre and feathers reveals they were not only used for cutting, scraping and sawing; they simultaneously sent signals about social phenomena. Because most backed artefacts were very small a reliable signal could not have been sent simply by displaying the objects, as they would have been barely visible and at a distance it might be hard to distinguish a backed artefact from a simple and less costly flake (Hiscock *et al*. 2011). Consequently, the specimens must have been inspected in detail for the construction norms to be evaluated, and training would have been involved in maintaining the similar forms across space and time.

The proposition that backed artefacts delivered social signals is all the more intriguing because of the chronological changes that occurred in backed artefact production. In every region in which they are known archaeological sequences show a single significant 'proliferation event', in which the production rates of backed artefacts increased substantially for a short period and then decreased to very low levels before backed artefact manufacture ceased altogether in the last millennium. Low chronological resolution makes the length of the event difficult to measure, but it is probably between a few hundred years and slightly more than a thousand years. The antiquity of the proliferation varies regionally, and is generally later in the arid zone than in better watered continental margins. In the Northeast, at locations such as the South Molle Quarry, the production of large backed artefacts appears to peak 9000–6000 BP (Lamb 2011). In the well-studied Sydney Basin of the southeast, the proliferation occurred between 3,500 and 2,500 years ago, and this timing appears to apply broadly along the south-eastern seaboard (Hiscock 2008). The regional variations in the timing of these proliferations indicate that reference to a simple, single, explanatory mechanism may not be plausible.

The quest to understand backed artefact proliferations also benefits from a consideration of the nature of post-proliferation technological systems. After the proliferation ended, regions in southeastern Australia display diverse technological strategies and assemblages, variously emphasizing forms such as 'scrapers', serrated saws, edge-polished flakes and cores, unifacial and bifacial cores made on pebbles, ground edge axes and bipolar cores. Although there are differences across the continent in the specific form of backed artefacts, they are all variants on a theme that reflect shared norms in production, shared technologies and shared perceptions about uses. The backed artefact proliferation can therefore be seen as a period in which foraging strategies and/or social signals were facilitated by a common set of materials across large tracts of the continent, whereas the following period was one in which patterns of flaked lithics became more regionally structured. We interpret the change as a shift from a phase of broad scale commonalities between regions in their shared use of the backed artefact forms, to a phase with more localized traditions. We may be observing a shift from greater emphasis of horizontal transmission of craft/social practices to a post-proliferation phase that emphasized vertical information transmission as regional trajectories developed. Intriguingly similar themes are visible in the transformations of technology making bifacial points in north-western Australia.

Australian bifacial points

Australian points come in a variety of sizes and shapes, although there is regional coherence to the variation. All share the definitional traits of retouch on convergent margins, but conventional typological divisions of points have not been powerful characterizations of either process or purpose in the formation of point variation. For example, it was traditional to distinguish unifacially flaked points from bifacially flaked ones, and many researchers argued that these were different kinds of tools with different histories. It is now clear that these often poorly defined typological categories do not track reduction processes in any simple way and therefore are not a basis for evaluating the relationship between the forms. Technical analyses of scar superimposition show that many bifacial points begin as unifacially flaked and eventually have a second face flaked to create bifaces, meaning that for bifaces the unifacial retouch was often an early production stage (Hiscock 1994b; Maloney 2015). However, in the same sites, unifacially flaked points were discarded without ever being bifacially flaked, and hence for those specimens unifacial working was not an early stage, it was the only stage. The pattern reveals that knappers were not applying identical practices to every specimen; instead production procedures varied to reflect blank sizes, specimen shapes, material quality, functional context and other factors. Responses of craftspeople to such factors, and the manufacturing processes themselves, are poorly revealed in the older typological classifications such as unifacial or bifacial, and our focus here is somewhat different. Tracing specific reduction processes (such as bifacial flaking or edge serration), techniques (such as percussion or pressure), and technological systems through time and space is a useful strategy with which to define change in point production.

Across northeastern Australia there are a number of sites with evidence for bifacial point production in the mid-Holocene. In western Arnhem Land a single specimen at Nauwalabila I is dated to 6675±110 cal. BP (Hiscock 1993) and in the southern Kimberley region bifacial points are found at the coastal Widgingarri 2 site associated with a sample dated to 5742 ± 94 cal. BP (O'Connor 1999: 74), at the inland Carpenter's Gap 3 site at around 5529 ± 46 (O'Connor *et al.* 2014: 17), and at Windjana Gorge Water Tank Shelter below a date of 5416 ± 66 cal. BP (O'Connor *et al.* 2008). These are statistically unlikely to be the earliest points made in the region and we conclude that bifacial point production was occurring over much of Arnhem Land and the Kimberley 6,000–7,000 years ago, although at low rates and as one component of a diversified tool kit. All of these early bifacial points were manufactured by direct hard hammer percussion, and this retouching technique was the only one employed in point manufacture until the last 1000–2000 years BP.

Discard of percussion flaked bifacial points becomes more common after 3,500–3,000 years ago, often increasing to double, triple or greater production rates. The onset of this point proliferation event, representing a greater investment in percussion point production in absolute terms and relative to other retouched forms, occurs at broadly the same time across much of the northwest. In a number of regions high production rates lasted only a few hundred years, perhaps as long as a millennium or so, and subsequently percussion bifacial point manufacture become either a minor element or eventually the practice ceased. In Arnhem Land the percussion point proliferation occurred between 3000 and 2000 years BP at well-dated sites: Ngarradj Warde Djobkeng and Nauwalabila I (Hiscock 1999). Dates for the Scotch Creek 1 site are also consistent with this chronology (Smith and Brockwell 1994). Broadly similar chronologies are found in the Kimberley, with percussion-made point discard being greatest between about 3000 cal. BP and less than 2000 cal. BP at Mount Behn (Maloney 2015). Several other sites across the Kimberley have recovered early points associated with dates between 3500 and 2000 cal. BP (eg. Dortch 1977; Veitch 1999). Maloney *et al.* (2014) report several reliable early dates for percussion points in the southern Kimberley, although most have been reported from within this later proliferation period. Far from the Kimberley and from coastal Arnhem Land, Clarkson (2006: 104) has argued that production rates of bifacial percussion points in the region south of Katherine were slightly later in time, with point discard peaking around 2000 cal. BP, perhaps reflecting a late adoption of the technological system. Distance from the region of innovation may in that way have created geographical variation in the antiquity of the biface proliferation.

The similarity in the timing of percussion point proliferation led researchers to propose common triggering mechanisms across northern and northwestern Australia. Explanations have often reflected the presumed functions of points. Many archaeologists presumed that pointed objects were spear armatures and hypothesized that the proliferation reflects increased projectile use, precisely the logic that had been employed for backed artefacts until detailed wear and residue evidence was obtained. For example, Smith and Brockwell (1994) proposed that the increased point production reflected greater use of duelling spears as intergroup conflict increased in response to local resource depression. An alternative proposition about bifacial point function is that these were forms that could serve many purposes and that we should expect to find different specimens put to different uses, and multiple uses on some specimens (Hiscock 1994a, 1994b, 2002, 2006, 2009, 2011; Clarkson 2006, 2007, 2008). There have been no extensive wear/residue studies to test this notion, but analysis of Widgingarri 1 and 2 points from the Kimberley showed the majority of points were used for processing plant materials (Wallis and O'Connor 1998), an observation more consistent with a multipurpose than a projectile function. Several researchers have evoked the relevance of generalist, multipurpose tool forms for models in which technology was structured to buffer groups against increased foraging risk that developed as a result of environmental change (Clarkson 2007; Hiscock 2009; Maloney 2015).

Risk reduction models of Australian lithic technology predicted that risk-reducing techniques and strategies would occur in periods of resource depression and higher resource variability. For the northwest of the continent risk models, in which bifacial points are multifunctional extractive tools, have been built on the broad correspondence in time between environmental proxies indicating uncertain and diminished resources and the proliferation events. For instance, Maloney (2015) argued that in the Kimberley region a bifacial percussion point proliferation occurs during a period of drying in which there are increasingly variable conditions, including pulses of localized aridity. Similar contexts have been noted for the proliferation of bifacial points in Arnhem Land (Hiscock 2006, 2009) and the inland Katherine region (Clarkson 2007). This environmental context is consistent with the proposition that these long-lived, multifunctional bifaces increased toolkit readiness and were selected in a period of heightened environmental uncertainty, and yet some archaeologists have emphasized that the covariation itself need not demonstrate that technology was responding to the economic pressures created by climatic conditions.

The main voice decrying risk models is Moore (2011), who has in fact agreed that intensive biface production was probably a response to increased economic risks. However, he views this as a 'proximate' cause and proposes that archaeologists should seek an 'ultimate' explanation, which he asserts will be found in demographic factors. This argument follows from his use of a now common assertion by archaeologists: that there is a logical connection between population growth and the value of material signals of social interaction. In his model, chronologically patchy occurrences of hierarchically complex and symbolically loaded technologies reflect demographic changes and were important in negotiating social relationships as they were employed 'as one form of information exchange to mediate the impact of a demographically stimulated rearrangement of Aboriginal land-use strategies' (Moore 2011: 145). This proposition is plausible, and yet it is neither necessary nor evidentially supported. Since the environmentally-elicited economic stresses themselves were capable of stimulating reorganizations of land use and since an emphasis on technically elaborate lithic artefacts could act both as social signals and as risk-buffering tools, as argued above for backed artefacts, there is no substantial explanatory benefit in demanding that there might be additional demographic processes in play. Indeed, as solutions to economic risk would underpin demographic growth in a period of heightened environmental change, the causal direction of linkages between technology and population change remain to be established. Additionally, Moore does not present independent evidence for demographic fluctuations in the Kimberley region, and unless we posit new modes of production the expectation that population increases were occurring during a period of resource depression creates a further conundrum. A recent review has shown that in the Kimberley region, there is no clear correlation between purported proxies of population change and the timing of technological shifts (Maloney 2015).

Ongoing changes in technological strategies challenge claims for simple 'ultimate' explanations and suggest that the long-term shifts in point technology are an outcome of multiple factors operating in historically contingent ways. After the hard hammer proliferation ended and point production declined or ceased in many regions, knappers invented or emphasized different production strategies. The pattern of change is one of radical technological transformations displayed in distinctive regional trajectories. In Arnhem Land, bifacial point production diminished and by about 1,500 BP, points were minor elements in assemblages dominated by large elongate quartzite flakes and tuff flakes steeply retouched on one margin, bipolar cores, and unretouched flakes (Allen 1996). Even these patterns were expressed differently in the landscapes within Arnhem Land (Hiscock 2009). To the south, Clarkson (2007) showed that as bifacial point production diminished over time, points were made with less retouch until unifacial points were the norm, and in the last millennium large, unretouched flakes were a focus of manufacturing. In the proto-historic and early contact period production of 'Kimberley points' was adopted in this region, diffused from the west (Davidson 1935). In the Kimberley region, biface manufacture was re-emphasized in the last millennium with the production of elaborate pressure flaked specimens (Maloney *et al.* 2014). Pressure flaking was associated at Mount Behn with a decline in the retouch intensity of percussion points (Maloney 2015) and is probably reflected in a regional trend where new forms of pressure flaking were adopted within the last millennium (Maloney *et al.* 2014). Kimberley points are bifaces that are different to earlier percussion bifaces in several ways: (1) they are finished with systematic pressure flaking across both surfaces, (2) in plan both lateral margins often have an s-shaped curve producing a thin tip, and (3) both margins are serrated (Akerman and Bindon 1995: 89). In historical times they were observed to have functioned as spearheads and were also used as trade and prestige goods (Akerman 2008; Harrison 2002, 2006).

These regional trajectories contrast with the assemblage uniformities between regions during the percussion biface proliferation, a pattern that displays clear parallels with the backed artefact proliferation. Hiscock (1994a) observed these similarities in the timing and pattern of backed artefact proliferations in the southeast and the percussion point ones in the northwest, concluding that if different factors were responsible for each proliferation then there were probably mechanisms that articulated the processes of technological evolution in the diverse regions. He also made the observation that if there have been the same or similar factors triggering the proliferations, the technological responses in the two parts of Australia would have varied because of historical contingency represented in the different technological traditions. We therefore take the view, that given available evidence, there are few advances to be gained by claiming that we understand the factors that were responsible for the percussion point proliferation. Instead we propose to focus on our inference that these technological traditions and their evolutionary patterns reveal something of the scale of social connectivity that was operating at different time periods.

Australian edge-ground axes

Axe heads with a distinctive ground bevel at one end are found archaeologically across much of mainland Australia, although they are not reported from a broad region of the southern coast and southwestern stony and sandy deserts (Figure 4.3.3). They are also absent from Tasmania, because until recent millennia they were restricted to northern Australia, and axe production was only taken up in southern Australia after the flooding of Bass Strait had isolated that land. Across their distribution axe shapes and axe production varied. In most cases the rocks selected for edge grinding were tough metamorphic or volcanic varieties although where such materials are scarce, granular quartzites or similar rocks were occasionally used. The investment of labour in axe manufacture could be little or great, reflecting not only the nature of raw materials but also whether the specimens were being created for personal use or for exchange (Hiscock 2005). Production processes normally reflected strategies for exploiting the material, with bedrock outcrops being quarried, surface boulders being directly reduced, and in some regions water-rounded cobbles being directly ground without preparatory working. Except in the latter case, specimens were shaped by hammer dressing (pounding) and/or by flaking. Grinding was achieved mainly through abrasion on sandstone, usually in creek beds where water could be used on the ground surface (Dickson 1981). The results of these procedures were axe heads that were often between 300 g and 1,000 g, although far larger specimens were occasionally made (Dickson 1981: 19–20). In many instances there are visible signs of the maintenance of axes to extend their use life, with re-flaking of broken bevels and regrinding of edges. This is evidence of the functional value of many axes, and yet at the same time the ethnography reveals that at the start of the colonial period, axes and their hafts were distinctive of particular sources/makers and that as signals of identity they reflected and regulated social interactions (McBryde 1984). We also know that axes were incorporated into cosmology and myth, sometimes as the focus of social responses to changes in environment and culture (Hiscock 2013).

No study has demonstrated significant change in axe form or function over time, but the geographical distribution of axes expanded dramatically in recent millennia. In the Pleistocene and early Holocene axes were manufactured only in northern, tropical Australia (Morwood and Trezise 1989), whereas by the late Holocene they were also being made over much of southern Australia. While the rarity of axes in deposits means that there is a faint archaeological signal, axes appear in many southerly regions between 4000 and 3000 BP. This antiquity for the geographical expansion of axe production is broadly coincident with both the percussion biface and backed artefact proliferation events, and the environmental shifts with which they are correlated. This pattern is consistent with our position that the proliferation events were phases of greater horizontal information transmission between social systems in Australia.

Conclusion

Our review of three Australian lithic technological systems indicates that they operated in distinctive ways, reflecting varied extendibility strategies, and that they satisfied a complex range of functional and communication needs. And yet they all share an evolutionary trend: massive geographic expansion in the production of specific implement forms during the period 3500–2500 BP. Our analysis documents that neither tool function nor social roles alone are adequate explanations of these systems. These artefacts were useful and were used in multiple ways, especially in craft activities. The production systems, and the objects they created, were also understood socially, and sent public signals. Geographic expansion of these signifying tools occurred during a period of climatic variability and resource depression, conditions in which standardized, multipurpose tools would have been advantageous (see Hiscock 1994a, 2002, 2006, 2008). We argue that the dispersal and maintenance of similar artefact forms and similar production technology, across the breadth of areas over which the three categories of artefact were employed, indicate shared technical training, related craft norms and similar social contexts; all indications of social connections. The nature of those intergroup connections now requires clarification. Shared lithic systems might have arisen through descent from an ancestral system, resulting from population movements/migrations, as well as from horizontal transmission of technologies and/or the foraging or craft practices that involved those technologies. Geographically extended networks may also reveal connections beyond Australia, indicated by some similar implement forms in island Southeast Asia (Bellwood 2013), the arrival of dingoes in Australia (Hiscock in press) and the presence of Pacific axes in coastal, eastern Australia (White *et al.* 2014).

The broad covariation in the maximum distribution of backed artefacts and of the Pama–Nyungan family of languages, as well as the geographic covariation of bifacial points and Non-Pama–Nyungan languages, has been suggested to stem from common social processes of transmission (e.g. McConvell 1996), but this proposition remains untested. Hiscock (2002) has argued that those geographic similarities in language and technological histories indicate long-standing transmission networks and geographic boundaries to transmission. Our argument here is that the size of information transmission systems, for technology at least, changed over time and that their scale is indicated by the geographic extent of these technologies and products. From this viewpoint we observe periods with spatially constrained transmission systems, containing distinct regional patterns, and other periods with broad-scale transmission networks, containing specific technological elements that are found widely. We have shown that in these terms there was a significant upscaling in the magnitude of social transmissions and connectivity across mainland Australia 4,000–2,000 years ago, reflected in the three proliferation events. In southern and eastern Australia there was a massive expansion of backed artefact production across virtually all of the lands occupied by Pama–Nyungan speakers in the historic period. In northern Australia bifacial point production expanded to cover the lands from the base of the Gulf of Carpentaria to the Kimberley, a distribution that covered the mainland regions in which Non-Pama–Nyungan languages were distributed. Edge-ground axes became extremely widespread, and their distribution spans all major language groupings. After the proliferation phase was completed, the emergence of more localized traditions may indicate reconfiguration of those broad-scale systems into more constrained transmission patterns. There have been interpretations, relying on other lines of data such as rock art, that the late Holocene was a period in which group boundaries became less permeable, or ‘closed’ (David and Lourandos 1998; Lourandos 1997), and this might articulate with the geographic scaling down of information transmission observable in the lithic technologies. In any case, we emphasize that changes in the distribution of information, in social connectivity, would have been associated with transformations of social and economic practices. Hence we anticipate that alterations in social learning, linked ideologies and iconographies, and group interactions would have accompanied the rescaling of transmission networks. In that way, the patterns of lithic technologies in Australia record the serial reconfigurations of continental-scale relationships between human groups.

We have argued that the emergence and subsequent disarticulation of spatially massive transmission networks in Australia during the Holocene is not explicable solely in terms of either environmental changes or as purely social dynamics. Instead, oscillations between geographically expansive and locally constrained social/signalling systems reveal compound cultural transformations related to the movement and interactions of societies across and beyond Australia. Trends in globalization are not unidirectional and we see both expansion towards large systems and contractions as the scale of interaction became more regional in expression. Conceptualizing these shifts is a step towards examining them further. We have explored them with the idea that these systems are operating in specific social and economic contexts and we propose that their longevity will probably reflect the duration of those contexts. In that case it is not appropriate to think of the contractions of these systems as failures or as collapses, but rather we hypothesize they were shifts in social strategies and patterns of social connection. Similarly, the emergence of contiguous and expansive signalling systems in the middle and late Holocene must reflect the contexts in each region before and during the technological proliferation of forms used for public signalling. In this chapter, we have synthesized some of the available information about the selective context in which Australian lithic technologies displayed trends towards and away from continental scale integration and inter-connectivities.

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4.4

Edges of worlds

Torres Strait Islander peripheral participation in ancient globalizations

Ian J. McNiven

Introduction

In September 1606, officers and crew of the *San Pedrico* and its launch *Los Tres Reyes Magos*, a Spanish expedition under the command of Captain Luis Vaéz de Torres, became the first recorded Europeans to sail through Torres Strait and to meet Torres Strait Islanders (Figure 4.4.1). According to Don Diego de Prado y Tovar, who chronicled the voyage, they named one of the islands Isla de los Perros (Island of Dogs) on account of local howling dogs (Hilder 1980: 74). On this same island, the expedition came across a cache of turtle shell plates used to make masks, a valuable product which Prado commented could fetch 300 ducats per hundredweight in Malacca to the west in Island Southeast Asia (Hilder 1980: 74). At the nearby island of Iama, named by the expedition Isla de Caribes, eight Islanders in two large outrigger canoes were encountered (Hilder 1980: 76). Here in central Torres Strait, 420 years ago, two groups of people with homelands on opposite sides of the globe, met for the first time over the course of a couple of days. While such encounters are usually couched singularly in terms of European globalization of the modern era, the circumstances and events of the meetings expressed the results of what I define as ancient globalizations stretching back thousands of years. The presence of dogs was an expression of an Aboriginal Australia globalization that emerged *c.*4,000 years ago; the presence of outrigger canoes was an expression of a Melanesian New Guinea globalization that emerged *c.*3,300 years ago; while the presence of valuable turtle shell plates was an expression of a Southeast Asia globalization that commenced only a century prior to the Spanish expedition. This chapter explores the involvement of Torres Strait Islanders in the dynamic peripheries of these three globalizations prior to the well-documented transformative impacts of British globalization and colonization commencing in the nineteenth century. Employing Jennings's (2011, this volume) conceptualization of globalizations, I argue that the impact of the two ancient (Australia and New Guinea) globalizations on Torres Strait Islander society was equally as transformative as the impact of nineteenth-century British colonization.

Figure 4.4.1 Luis Vaéz de Torres and the *San Pedrico* and *Los Tres Reyes* sailing through territorial seas of Torres Strait Islanders in 1606 CE (source: *Picturesque Atlas of Australasia*, v. 1, 1886, courtesy: John Oxley Library, State Library of Queensland)

Globalizations

Perhaps the simplest way to define globalization is societies that have been influenced by extra-regional cultural processes, often across extensive geographical space, that may be continental or oceanic in scale. These cultural expansions 'bring formerly separate regional systems into systemic intercourse with one another', such that the interactions are two-way and even mutually transformative (Chase-Dunn and Jorgenson 2001). As with Wallerstein's (2004) concept of 'world-systems', the process of globalization does not have to equate with a global scale of interaction (Jennings 2011: 3, this volume; Feinman this volume). Importantly, Jennings (2011: 8–10, 22) argues that removing the necessity of global in geographical scale allows moving away from orthodoxy and a Eurocentric equation of globalization with modernity and Westernization dated to the past 500 years (e.g. MacGillivray 2006) and even to the past 200 years (e.g. O'Rourke and Williamson 2002). Jennings (2011: 10) also has problems with studies that identify globalization as uniquely a 'long-term process' gradually developing and intensifying over thousands and in some cases tens of thousands years (e.g. McNeil 2008). Alternatively, Jennings prefers to see world history as allowing for 'multiple periods of globalization to have emerged within unique cultural, environmental, and historical settings' (2011: 8). The notion of 'multiple globalizations' and indeed *multiple worlds* is seen to move beyond the core–periphery economic and political structural limitations of Wallerstein's (2004) world-systems model. Indeed, while all globalizations have peripheries, not all ancient globalizations have easily definable cores.

According to Jennings, the two key 'criteria' for identification of periods of globalizations in the past are a 'significant leap in interregional interaction' and 'social changes that are associated with the creation of a global culture' (2011: 13). In terms of the second criterion, global culture occurs when 'people's lives are fundamentally transformed by the increased flow of long-distance goods, people, and ideas' (Jennings 2011: 31). The strength and impact of these flows upon participating communities and societies depends on their position and degree of incorporation within the overall network. Of particular interest to this chapter are societies located on the peripheries of globalizations. Here, the degree of incorporation within a globalization can be measured in terms of the extent to which cultural transformations and the flow of 'goods, people, and ideas' ranged from one-way (mild incorporation) or two-way (strong incorporation) (Hall 1986, 2000). However, the extent to which communities uptake flows is rarely passive and reflects proactive filtering and negotiation such that even mild peripheral incorporation may result in major cultural transformations (Hall 2000: 242; Kardulias 2007).

Jennings (2011: chapter 7 and this volume) identifies eight non-mutually exclusive 'hallmarks' of global culture. They are: time–space compression (e.g. increasing speed of communication and transportation), deterritorialization (e.g. increasing permeability of social and cultural boundaries), standardization (e.g. increasing use of shared practices to enhance cross-cultural interaction), unevenness (e.g. core–periphery inequalities), cultural homogenization (e.g. cross-cultural uptake of shared practices), cultural heterogeneity (e.g. increasing hybridity through additions of foreign peoples, objects, and practices), re-embedding of local culture (e.g. increasing attention to local identity), and vulnerability (e.g. increasing external control of lives and identity). Importantly, Jennings points out that while these 'eight hallmarks of global cultures should all be widely discernable during a period of globalization . . . this does not mean that each hallmark will be pervasive in all areas' (2011: 122–23; see also this volume). This issue of pervasiveness is particularly relevant for societies located on the peripheries of globalizations. These hallmarks will help structure my explorations of Torres Strait Islander incorporation into four globalizations over the past 4,000 years.

Torres Strait Islanders

Torres Strait is an archipelago consisting of hundreds of, mostly, small islands spread across 150 km of sea that separates the mainlands of Australia to the south and New Guinea to the north. Geographically, it is divided into three major groups – the Western (including Top Western), Central, and Eastern Islands. The region is home to Torres Strait Islanders, Indigenous marine specialists with a strong social and spiritual identity linked to the sea, expansive territorial seascapes, and subsistence focused on dugongs, turtles, and fish (e.g. Barham 2000; Beckett 1987; Haddon 1935; Johannes and MacFarlane 1991; McNiven and Hitchcock 2004; Mulrennan and Scott 2008; Nietschmann 1989; Sharp 2002). Plant foods were mostly produced in horticultural gardens (e.g. yams, sweet potatoes, and bananas) and dispersed orchards of fruit trees (e.g. *wangai*). A complex regional exchange system, underwritten by huge double outrigger sailing canoes, operated across the region and connected island communities with mainland peoples of New Guinea and Australia (Lawrence 1994; McNiven 1998). The strait was formed around 8,000–9,000 years ago as a result of post-glacial rising sea levels (McNiven 2011a). Archaeological research reveals evidence of occupation back to at least 9,000 years ago, with earliest evidence for marine subsistence specialization dated back to at least 7,200 years ago (David *et al.* 2004; Wright *et al.* 2013). Intensified periods of occupation take place *c.*4,000 years ago and again at *c.*2,600 years ago with the latter associated with introduction of pottery (Barham 2000; Carter and Lilley 2008; Crouch 2015; McNiven *et al.* 2006). A further period of intensified occupation occurs within the past 600–800 years with a major period of ceremonial site expansion commencing 400–500 years ago (e.g. David *et al.* 2009; McNiven 2006; McNiven *et al.* 2009). While aspects of many of these changes reflect responses to small-scale local and regional social and environmental issues, I argue that many also reflect responses to broad-scale environmental (e.g. climatic) and social processes (e.g. globalizations) operating across huge areas of geographical space. It is these globalizations that are the concern of this chapter.

Aboriginal Australia globalization

David *et al.* (2004) and McNiven *et al.* (2006) identify an increase in occupational intensity in the Western Islands of Torres Strait within the period of *c.*3,000–3,800 years ago at both Badu 15 rock shelter on the island of Badu, and Mask Cave to the immediate north on the islet of Pulu, respectively. McNiven *et al.* (2006: 66) point out that this period of 'demographic expansion' is restricted to the Western Islands, as it predates the earliest evidence for occupation of the Eastern Islands and formation and occupation of the reef islands of the Central Islands (Carter *et al.* 2004; Woodroffe *et al.* 2007). While earlier evidence for occupation of Torres Strait islands has been recovered from Badu 15 on Badu and Dabangay on Mabuyag (David *et al.* 2004; Wright *et al.* 2013), the validity of a period of demographic expansion across western Torres Strait *c.*3,000–4,000 years ago has been enhanced by the Sarbi 2 midden site on the islet of Sarbi dating to *c.*4200–3500 cal. BP (Crouch 2015).

McNiven *et al.* (2006: 66) link the demographic expansion in Torres Strait *c.*3,000–3,800 years ago more broadly with 'mainland Australia' to the south, as it 'coincides with the onset of intensified Aboriginal activity in northern Queensland . . . and across other parts of the continent'. In particular, 3,500 years ago marks the beginning of a major phase of intensified use of islands along the Queensland coast, especially the central Queensland coast which has been a focus of research. Rowland (1999) notes changes around 3,500 years ago within the Mazie Bay midden site in the Keppel Islands group. More relevant is evidence for increased use of central Queensland islands in the form of increased establishment of new sites (Barker 2004; Border 1999; McNiven *et al.* 2014). Barker argues that changes after 3,000 years ago in the Whitsunday Islands of central Queensland indicate 'a demographic restructuring of populations' involving 'markedly increased regional and site use, including the exploitation of previously unoccupied islands and an intensification of the marine resource base' (2004: 148). These regional changes were widespread, with Ulm pointing out that 'evidence for increasing use of islands after 4,000 years ago appears along the length of the northeast Australian coast' (2011: 449).

Demographic expansions taking place 3,000–3,500 years ago on the central Queensland coast have been associated to varying degrees with changes in marine resource availability (e.g. McNiven *et al.* 2014; Rowland *et al.* 2015) and 'changes in inter-regional social relations' (Barker 2004: 150). In one sense, the widespread extent of such changes may relate more to similar responses to equally widespread environmental changes. However, demographic expansions taking place 3,000–4,000 years ago within western Torres Strait and along thousands of kilometres of the Queensland coast also form part of a broader package of social and cultural changes taking place across much of Australia that are encapsulated in Lourandos's (1997) concept of 'intensification' but also conform to what might be conceived of as a globalization.

Three key continental scale changes in Aboriginal society taking place *c.*3000–4000 years ago that are consistent with globalization are the spread of dingoes, backed artefacts, and Pama Nyungan languages (see also Hiscock this volume). In terms of the dingo (*Canis lupus dingo*), McNiven and Hitchcock (2004: 121–22) argue that settlement expansions across western Torres Strait 3,000–3,500 years ago facilitated movement of dingoes from mainland New Guinea southwards to the Australian mainland. That is, domesticated (or at least tamed) dingoes island-hopped across Torres Strait with the aid of people via canoes. This hypothesis is based on earliest evidence of the dog in Australia at 3,700–3,500 years ago (McBryde 1982; Milham and Thompson 1976) and evidence for the antiquity of dogs in New Guinea that is earlier at 5,500 years ago (Bulmer 2001) or at least contemporaneous with Austronesian colonists from Southeast Asia *c.*4,000–3,500 years ago (e.g. Specht *et al.* 2014: 114–15). Recent Y-chromosome and mtDNA analysis supports the Torres Strait conduit hypothesis, whereby a 'high degree of sharing of the gene pools of the Australian dingoes and dogs in New Guinea indicates that the dingoes were introduced, probably exclusively, via New Guinea' (Ardalan *et al.* 2012: 71).

The cultural, social, and environmental impact of the introduction of domesticated dingoes to mainland Australia is likely to have been significant (Balme and O'Connor 2016; Fillios *et al.* 2010; Smith and Litchfield 2009). For example, based on modern studies which reveal that small animals comprise the bulk of dingo diets, Balme and O'Connor (2016) hypothesize that ethnographically known use of dingoes as hunting aids would have preferentially increased food returns to Aboriginal women across Australia, whose hunting practices similarly focused on small game animals (e.g. mammals and reptiles). Such a close subsistence relationship between dingoes and Aboriginal people was also expressed religiously, with known incorporation of dingoes into Dreaming cosmologies, rock art, and ceremonies (Balme and O'Connor 2016; Flood 1997; Gunn 1983; Gunn *et al.* 2010). Such was the intimacy between dingoes and Aboriginal people that dingoes were the only animals provided with formal ritualized burials (e.g. Gollan 1984; Gunn *et al.* 2010; Littleton *et al.* 2013; Pardoe 1996). The fact that dingo burials and depictions of dingoes in rock art occur (albeit sporadically) in the northern and southern parts of the continent reveals that Aboriginal sociocultural responses to the introduction of the dingo 3,500–4,000 years ago were in some ways underpinned by a shared capacity for the ontological positioning of dingoes as non-human persons. More broadly, Johnson posits that Aboriginal people had a greater impact on the size and distribution of dingo populations than previously acknowledged, such that the spread of dingoes (and by implication dingo–human interactions) across Australia may have been a cultural artefact and 'a consequence of some features of intensification – a new interest in novelty and variation, and extended trade networks' (2006: 152–53).

Backed artefacts are a distinctive stone implement type with diagnostic steep retouch (usually bipolar) along one margin of a flake or blade. They vary regionally, with some areas dominated by long (up to 6 cm), slender backed artefacts (e.g. Bondi points) and other areas dominated by backed artefacts that are shorter and more symmetrical (e.g. geometric microliths) (Hiscock 2014 and this volume). They are found across Australia except in the far southern (i.e. Tasmania) and far northern sections of the continent. Although examples dating back to 6,000–8,000 years and even 15,000 years ago have been recovered (Hiscock and Attenbrow 2005; Slack *et al.* 2004), Hiscock notes the 'onset of higher production rates between 4,500 and 3,500 years ago' and that 'this characterisation appears to be broadly applicable across many portions of southern Australia' (2002: 167). This 'proliferation event . . . occurred for only a limited period, perhaps 1,000–1,500 years in some places and less than 300–400 years in others' (Hiscock 2008: 160).

Hiscock (2002) sees backed artefact 'proliferation' as an historically contingent response, in part, to risk associated with increasing environmental variability and associated resource uncertainty linked to intensifying ENSO (El Niño Southern Oscillation) climatic events. Acknowledging that such risk minimization strategies were 'socioculturally mediated' (David and Lourandos 1998: 212), McNiven privileges a sociocultural explanation to answer the question of, 'Why did so many different communities from vastly different environmental contexts (e.g. subtropical coastlines, Alpine regions, arid interior) over such a vast area agree to go down the same technological path?' (2011b: 71). That is, the 'wide-ranging shared tradition of backed artefact production and use reveals a desire for social inclusiveness by multiple neighbouring communities through shared possession of a mutually recognizable, *mundane* stone implement type' (McNiven 2011b: 71). Social inclusiveness (with risk minimization) most likely also explains shared proliferation of tula adzes and large millstones across the arid/semi-arid zones of Australia after 3,800–3,700 years ago (Smith 2013: 190; Veth *et al.* 2011).

The importance of social dimensions in the proliferation of backed artefacts, tula adzes, and millstones across most of Australia *c.*4,000–3,500 years ago is revealed by broad spatial correspondence with expansion of the Pama-Nyungan language family across about 80 per cent of the continent during the mid-Holocene. Pama-Nyungan languages are 'relatively homogeneous' and began spreading around 3,000–5,000 years ago (Evans and McConvell 1997: 179; Veth 2000). Views on processes responsible for the spread of Pama-Nyungan languages across Australia are varied, with linguists inclined towards population movements and archaeologists leaning more towards the diffusion of ideas, not people (e.g. Evans and McConvell 1997; Smith 2013: 205; Veth 2000). Whatever the case, linguists point out that the Pama Nyungan language spread was a 'trans-continental chain-reaction' underpinned by 'a shift from a social structure made of small, isolated, endogamous and inward-looking groups to one characterized by alliance, exchange, exogamy and the integration of other groups into ceremony, marriage and lithic technology' (Evans and McConvell 1997: 184, 186).

Archaeological and anthropological evidence point to the shared uptake and spread of dingoes, specific stone artefact forms, and Pama-Nyungan languages across most of Australia between 3,000 and 5,000 years ago. Such sharing of cultural traits on a continental scale clearly points to a multitude of differing groups mediating inter-regional social relationships through the mutual production and use of shared technologies (e.g. backed artefacts), shared languages (i.e. Pama-Nyungan), and shared dingo–human relationships. While these shared cultural traits conform to tenets of Lourandos's (1997) 'intensification' paradigm of socio-demographic change, the role of agency, intentionality, and the desire of hundreds of groups to participate in such sharing and interconnectivity remain poorly understood. It is in this context that understandings of the development of inter-regional networks and broad-scale uptake of shared cultural traits may be enhanced by conceptualization of an Australian Aboriginal globalization. Indeed, the development of social networks enhancing the speed of movement and sharing of ideas and objects across the continent conforms in part to Jennings' (2011, this volume) globalization 'hallmarks' of enhanced time–space compression, standardization, and cultural homogenization. Regional variations in the stylistic form of stone implements (e.g. backed artefacts) and languages making up the Pama-Nyungan family are similarly consistent with Jennings's globalization 'hallmarks' of re-embedding of local culture and local identity maintenance. While Torres Strait (and the adjacent Cape York Peninsula region of northeast mainland Australia) fall outside of the distribution of backed artefacts, I propose that shared demographic expansions coupled with the Pama-Nyungan 'core' of the western Torres Strait language (Mitchell 2015: 342) points to the peripheral incorporation of Torres Strait into this Aboriginal globalization.

Melanesian New Guinea globalization

Linguistic and archaeological (pottery) evidence from Torres Strait and coastal Papua New Guinea indicates that Torres Strait was incorporated into a Melanesia-New Guinea globalization *c.*2,600 years ago. A contemporary legacy and clue to this ancient globalization is again provided by Pama-Nyungan languages. That is, the Pama-Nyungan (Aboriginal) core of the western language of Torres Strait has been augmented by New Guinea (Papuan and Austronesian) linguistic additions (Alpher *et al.* 2008; David *et al.* 2004: 74–75; Mitchell 2015: 342–43; cf. Hunter *et al.* 2011). One of the clearest expressions of Austronesian language influences in Torres Strait is outrigger canoe terms. Haddon (1937: 192) documents that the term for canoe amongst north Queensland Aboriginal groups at Cape Bedford and Cooktown is '*wangga*' and suggests that this 'is the equivalent of *waka*, which is the almost universal Austronesian word for an outrigger canoe' (see also Pawley and Pawley 1998). Haddon's (1937: 192) contention that similarities also exist in the word for outrigger/outrigger float between Torres Strait and the south coast of Papua New Guinea has strong empirical support. Moving westwards for 1000 km along the south coast, the word is *sarima*, *sama* (Massim), *ralina* (Hula), *darima* (Motu), *garima* (Gabadi), *dalima* (Nara), *tarima* (Roro), *tariva* (Toaripi), *karima* (Koriki), *sarima* (Kiwai), and *harima* (Mawata) (Dutton 1982: 77; Haddon 1937: 204). Moving into Torres Strait, the word in the Western-Central Language is *saima* or *sarima*, and *sirib* in Meriam mìr (Eastern Language) (Haddon 1937: 194, 204), while for the Gudang of Cape York, the term is *charima* (MacGillivray 1852, II: 291). As such, insights into the antiquity of Austronesian language influences in Torres Strait also provide insights into the antiquity of the introduction of large outrigger canoes to the region (Haddon 1935: 313; McNiven 2015: 132; Moore 1979: 308–13). Carter and Lilley (2008) caution that Austronesian language additions to Torres Strait languages may relate to the influx of South Sea Islanders (e.g. Vanuatu, Samoa, Fiji) to the region in the nineteenth century, associated with the London Missionary Society and the pearlshelling industry. However, Mitchell (2015: 349–50) argues that words such as those for canoe outrigger/outrigger float are older South-East Papuan Austronesian words that reflect 'long-term contact, none of which occurred with any post-colonial South Sea Islanders'.

Archaeological evidence for the introduction of pottery to Torres Strait provides important insights into the antiquity of Austronesian linguistic influences and large outrigger canoes in the region and on the nature and timing of incorporation into the Melanesia-New Guinea globalization. The earliest evidence for pottery in Torres Strait comes from Mask Cave on Pulu in the west and Ormi on Dauar in the east. The Mask Cave earthenware pottery is dated back to *c.*2,400–2,600 years ago, while the Ormi earthenware pottery is spread through a phase dating to *c.*1,950–2,600 years ago (Carter 2004; Carter *et al.* 2004; McNiven *et al.* 2006). None of the pottery is decorated with designs, but many sherds exhibit a reddish slip. The Mask Cave sherds appear to have been made locally in western Torres Strait, whereas the Ormi sherds appear to have been imported from the Papuan Gulf region of Papua New Guinea. While the nature of Torres Strait items moving into the Papuan Gulf in exchange for pottery is unknown, it is possible they included shell valuables as recorded ethnographically (see Haddon 1904: 295; Lawrence 1994). As McNiven *et al.* (2006) associate the Mask Cave pottery with pottery makers of the Papuan Gulf, all of the early Torres Strait pottery is linked to existing pottery traditions of the south coast of Papua New Guinea. More specifically, they hypothesized that the introduction of pottery to Torres Strait was linked to the early movement of pottery-making Austronesian-speaking peoples westwards along the south coast of Papua New Guinea (McNiven *et al.* 2006: 75). Recent recovery of Lapita pottery manufactured by Austronesian immigrants 2,600–2,900 years ago on the south coast of Papua New Guinea provides strong support for McNiven *et al.*'s (2006) hypothesis (David *et al.* 2011; McNiven *et al.* 2011; Skelly *et al.* 2014). Although the Torres Strait pottery is undecorated and shows no decorative conventions consistent with Lapita, its antiquity strongly implicates terminal Lapita and Austronesian connections, given that no other pottery traditions occur in Melanesia at this time (Skelly *et al.* 2014: 471). As such, large outrigger canoes probably have an antiquity of 2,400–2,600 years in Torres Strait (McNiven 2015: 132; cf. Barham 2000: 299). It is in this connection that pottery, large outrigger canoes, and Austronesian linguistic influences in Torres Strait can be linked to a Melanesia-New Guinea globalization with the Lapita Cultural Complex at its core.

Lapita pottery, with its finely executed dentate-stamped designs, developed in the Bismarck Archipelago of northeastern Papua New Guinea by 3,300 years ago (see Sand this volume). It has been found at more than 200 sites extending across the western Pacific until around 2,600–2,800 years ago and possibly in more simplified form to around 2,100 years ago in the Bismarck Archipelago (Denham *et al.* 2012; Sand *et al.* 2011; Summerhayes 2007).

Lapita pottery forms part of a broader assemblage of material culture and cultural practices expressed archaeologically as the Lapita Cultural Complex, which is associated with the movement of Austronesian-speaking peoples out of Southeast Asia (Carson *et al.* 2013). While the integrity of the Lapita Cultural Complex is debated (e.g. Specht *et al.* 2014; Terrell 2009), the fact that locally produced Lapita pottery occurs in island communities with closely related, shared DNA markers (e.g. Matisoo-Smith 2015) spread across 4500 km of the western Pacific indicates substantial biological and cultural connections and inter-regional networks. Indeed, the 'focus on a *unique decorative system* most importantly denotes a shared cultural meaning or context, different from the spread of pottery-making just for its technical practicalities' (Carson *et al.* 2013: 20). Such interaction is also expressed by the movement of obsidian over a distance of 3,000 km eastwards from the Bismarck Archipelago out to Fiji (Summerhayes 2009). Around the same time, Bismarck Archipelago obsidian is traded through to Borneo some 3,500 km to the west (Bellwood and Koon 1989). With a distributional array of 6,500 km, Bismarck Archipelago obsidian represents the 'the widest distribution of obsidian the world has ever seen' (Summerhayes 2009: 115).

The widespread distribution of similar materials (e.g. obsidian), ideas (e.g. Lapita pottery designs), languages (i.e. Austronesian), and peoples (e.g. mtDNA and Y chromosome) are clear expressions of the 'Lapita diaspora' (Lilley 2007) and associated social integrations and inter-regional networks that underpin the Lapita Cultural Complex. In this sense, the Lapita Cultural Complex is not only an 'early community of culture' (Golson 1961: 176), but also features hallmarks of globalization defined by Jennings (2011, this volume; also Sand this volume). In addition, regional 'provinces' of the Lapita Cultural Complex (e.g. David *et al.* 2011; Kirch 1997: 69–74; Sand 2001) reveal local innovations and regional identities also consistent with globalizations. Such regional variants also express Green's (1991, 2000) 'Triple-I' model of Intrusion, Innovation, and Integration, particularly in contexts such as mainland New Guinea whereby incoming Lapita colonists were influenced by existing communities and vice versa (e.g. David *et al.* 2011; Gaffney *et al.* 2015; McNiven *et al.* 2011; Specht 2009). Indeed, the Triple I model may also have relevance for western Torres Strait, whereby existing communities integrated incoming peoples from the New Guinea south coast *c.*2,600 years ago who themselves represented the results of earlier admixtures of local peoples and incoming Austronesian-speaking Lapita peoples. This hybridization model presents qualifications to the conclusion by McNiven *et al.* (2006: 73) that the population influx to Torres Strait 2,600 years ago was a 'Papuan migration and not an Austronesian migration' and Mitchell's (2015: 348) recent statement that 'Austronesians were directly involved in the settlement of Torres Strait' (see also Carter and Lilley 2008: 79). Whatever the case, Torres Strait society was changed fundamentally by an influx of New Guinea peoples and ideas around 2,600 years ago. This influx was an extension of terminal Lapita developments along the south coast of Papua New Guinea (see also Skelly *et al.* 2014: 485) and represented peripheral incorporation into a Melanesia-New Guinea globalization that began emerging 3,300 years ago in the Bismarck Archipelago.

Southeast Asia globalization

Linguistic and archaeological (ceramics) evidence from Torres Strait indicates that the region participated on the periphery of a Southeast Asia (island and mainland) globalization from the sixteenth through to the nineteenth centuries. In many respects, the Southeast Asian and European globalizations are closely linked, whereby the Spice Islands trade system, which centred on the Moluccas and whose history Swadling (1996) rightly identifies as most relevant for nearby New Guinea (and by extension Torres Strait), was given a major boost by entry of the

Portuguese, the Spanish (sixteenth century), and the Dutch (seventeenth century) (Chase-Dunn and Jorgenson 2001; Frank 1998). As Hall states, '[f]rom roughly 1000 CE until the nineteenth-century "industrial age", all world trade was more or less governed by the ebb and flow of spices in and out of Southeast Asia' (1992: 183).

During the sixteenth century, the Spice Islands trade system focused on cloves, nutmeg, and mace and was internationalized by the involvement of the Portuguese, Spanish, Chinese, and Javanese (Andaya 1992; Meilink-Roelofsz 1962: 95, 99; Swadling 1996: 31–35; Villiers 1981: 727). In the seventeenth century, the Dutch moved into the Spice Islands trade system and in 1602 established the VOC or Dutch East India Company, with its headquarters on Java (see Pitts this volume). Dutch records confirm that Chinese traders continued to visit the Moluccas in the early 1600s (Meilink-Roelofsz 1962: 100). However, the critical role of Asian merchants in the Spice Islands trade system collapsed after the Bandanese were subjugated by the Dutch in 1621 (Swadling 1996: 41; Villiers 1981: 749–50). Dutch control over the Spice Islands trade system led to an intensification of Asian trading contacts along the south coast of western New Guinea. According to Swadling, after the collapse of Banda in 1621, Bandanese escapees to the Seram Laut Islands expanded the local inter-island trade system to include southwest New Guinea, where 'captured slaves and massoy' were traded for 'textiles, beads, etc.' (1996: 43, 137).

Historical records have little to say on the nature of Seram Laut trading on the south coast of western New Guinea for most of the seventeenth and eighteenth centuries. However, in the late eighteenth century it is known that the VOC allowed only Chinese traders working out of the Moluccas (Ternate and Tidore) and Ambon to trade along the north coast of western New Guinea (Swadling 1996: 113, 122). In return for massoy bark, slaves, ambergris, trepang, turtle shell, pearls, parrots, and birds of paradise, the Papuans received iron tools, chopping knives, axes, blue and red cloth, beads, plates, and bowls (Swadling 1996; see also Hughes 1977: 23–24). This trade restriction was lifted with the collapse of the VOC in the 1790s (Swadling 1996: 122). As a result of the VOC withdrawal, the Seramese 're-established' their trade relations with the Aru Islands, but continued trade activities along the southern coast of western New Guinea and possibly into Torres Strait well into the nineteenth century (Swadling 1996: 154).

Swadling (1996) rightly notes that linguistic evidence points to direct involvement of Torres Strait Islanders in the Seramese trade system during the nineteenth and possibly eighteenth and seventeenth centuries (see also Laba 1996). Neither archaeological nor historical evidence indicates that Torres Strait Islanders or Aboriginal Australians manufactured metal artefacts. In western New Guinea, bellows were used to soften metals (mostly iron) to manufacture a range of objects, particularly utensils (Kamm and Kooijman 1973). Yet in 1792, Captain Bligh was asked by Erub Islanders in eastern Torres Strait for iron using the words 'toore-tooree' (Flinders 1814, I: xxii). Similarly, in 1802, Matthew Flinders was asked by Murray Islanders (eastern Torres Strait) for '*tooree! tooree!*' (iron) (Flinders 1814, II: 108). Swadling (1996: 156; see also Hughes 1977: 24–25) argues that *toore-tooree* is derivative of the Seram Laut word for iron/knife (*toerik/tuka/turi/turika/turito*). Although Swadling (1996: 157) suggests that the focus of the Seramese traders was *damar* (tree resin used mostly for torch fuel) from the Trans-Fly region opposite Torres Strait, direct trading contacts with Torres Strait Islanders should not be discounted. The Strait is a rich source of trepang, turtle shell, and pearl shell, all familiar Seramese trade items. Whatever the case, the uptake of iron would have altered the nature of tool use for a people previously dependent on the manufacture and use of stone tools.

Mitchell (2015: 340) suggests that linguistic information also points to visits from Macassan trepangers from Island Southeast Asia. He identifies a range of 'Malay' words found in the western language of Torres Strait that are 'common to a variety of Indonesian languages'. Examples

include: *adhi*: huge great, cf. Malay *adi*: 'regal, great' (Sanskrit *adhi*); *baayu,* baayw: waterspout, cf. Malay *bayu*: 'wind' (Sanskrit *vayu*); *kœdál*: crocodile, cf. Malay *kadal*, Makassarese *kaDalaq*: 'lizard'; and *kòòda*: important discussion place, men's sacred enclosure, cf. Malay *kota/kuta*: 'city etc.', Javanese *koTa/kuTa* (Sanskrit *kostha*: 'city, city wall, sacred enclosure, etc.') (Mitchell 2015: 340). These loanwords suggest that Southeast Asian influences may have been significant given that *kòòda* (or *kod*) is arguably the most important ceremonial and social site type of western and central Torres Strait, while *kœdál* is an important totem in the region.

Further support for Macassan trepangers visiting Torres Strait is provided by LMS missionary Reverend W.H. MacFarlane, who informed Haddon that 'Torres Strait islanders agree in stating that the Chinese who came in their junks seeking trepang and working for lengthy periods among the Western islands were "proper good men" and gave them no trouble' (Haddon 1935: 15). To date, the only archaeological evidence from Torres Strait that is likely to be linked to the Southeast Asia globalization is a series of ceramic sherds recovered from the islands of Pulu and Mabuyag in central western Torres Strait (Grave and McNiven 2013). Comparative elemental composition and stylistic analysis of three earthenware and six stoneware sherds from the Pulu ceremonial *kod* site points to nineteenth-century manufacture in Thailand and possibly also Burma. In contrast, similar analysis of the tiny sherd of glazed stoneware excavated from Goemu village on Mabuyag points to a southern Chinese decorated jar dating to the sixteenth century. Grave and McNiven conclude that both sets of ceramics 'reflect contact with Southeast Asian traders' (2013: 4549). Specifically, they note that 'Chinese traders carrying mainland Southeast Asian ceramics (e.g. Thai and Burmese wares) may have journeyed eastwards along the south coast of western New Guinea and on to the western islands of Torres Strait during the early to mid-nineteenth century.' This inference is consistent with the historically recorded 'boom' in Chinese trade with Thailand and Burma between 1770 and 1850 (Grave and McNiven 2013: 4549; Reid 1993: 24–26). Grave and McNiven (2013: 4549) do not associate the Pulu and Mabuyag ceramics with Macassan trepangers, given that Torres Strait lacks historical evidence for such activity and classic archaeological markers of trepangers such as stone-lined fireplaces (for boiling trepang) and settlement sites. This situation contrasts markedly with other parts of coastal northern Australia (e.g. the Kimberley and Arnhem Land) where considerable archaeological evidence documents visits by Macassan trepangers dating from the nineteenth century and back possibly to the sixteenth century (e.g. Macknight 1976; Morwood and Hobbs 1997; Taçon *et al.* 2010; Theden-Ringl *et al.* 2011).

Conclusion

In settler-colonial contexts such as Australia, the impacts of European colonialism and globalization upon Indigenous societies is rightly characterized as both transformative and traumatic. Indeed, the scale of impact is invariably couched in terms of the most transformative impact ever experienced by Indigenous societies. While the traumatic dimensions of European colonialism are usually without historical precedent, the scale of transformative change may not be unique. For Torres Strait Islanders of northeast Australia, the impact of British colonial settlement commencing in the second half of the nineteenth century was transformative but less violent compared with many parts of Aboriginal Australia (e.g. McNiven in press; Ørsted-Jensen 2011). The entry of Torres Strait Islanders into the international pearlshelling industry in the 1870s, coupled with associated missionary cosmological and moral imperialism, colonial governance and domination, and influx of peoples from distant shores (e.g. Southeast Asia and the Southwest Pacific), dramatically increased the cosmopolitan character of Torres Strait Islander culture and society (e.g. Beckett 1987; Ganter 1994; Mullins 1995; Shnukal *et al.* 2004).

Yet taking a broader and longer look at Torres Strait Islander history on a timescale measured in thousands of years reveals a series of equally transformative impacts similarly related to globalizations. In each case, Torres Strait was incorporated into these ancient globalizations that emerged *c.*4,000 years ago (Aboriginal Australia), *c.*3,300 years ago (Melanesian New Guinea), and *c.*500 years ago (Southeast Asia). While Torres Strait Islander involvement in the Aboriginal Australia and Southeast Asia globalizations appears to have been immediate, involvement in the Melanesia-New Guinea globalization was delayed until *c.*2,600 years ago, or some 700 years after it first emerged.

Torres Strait Islanders have consistently been located on the edges of worlds and associated globalizations. In the anthropological and archaeological literature, this border status has been discussed solely in terms of the meeting of the hunter-gatherer world of Aboriginal Australia and the agricultural world of Melanesian New Guinea (e.g. Beckett 1987; Haddon 1935; Harris 1977). In more recent times, Torres Strait is located across the shared border of the sovereign nation states of Australia and Papua New Guinea. This paper extends discussions of the border status of Torres Strait to a series of ancient cultural and social globalizations that in many ways better accommodate and explain the cultural complexity and *longue durée* of Torres Strait Islander history. In all cases, the particular expression of outside influences was given a local Torres Strait flavour. As Friedman notes, ‘the global only exists in its local effects’ (2008: 119). Furthermore, these globalizations only conform to selected ‘hallmarks’ of globalization identified by Jennings (2011, this volume). Yet such selectivity should not be read simply as a proxy for degrees of globalization. Some hallmarks are more highly expressed than others, such that high-impact presence of one or two hallmarks may reflect greater globalization than low-impact presence of all eight of Jennings’ hallmarks of globalization.

Importantly, highlighting these ancient globalizations puts nineteenth-century British colonial impacts upon Torres Strait Islanders in a different light. That is, Torres Strait Islanders had experienced equally transformative changes in the ancient past whose legacies continue to find expression in modern generations. Such multiple globalizations reveal the capacity of Torres Strait Islander society to accommodate new cultural and social opportunities and challenges as they arrived on their doorstep over the past 4,000 years. Ultimately, acknowledgement of these multiple globalizations and their transformative consequences undermines Eurocentric views on the singular importance of British colonial impact and subverts the historical and epistemological authority of the pre-contact/post-contact divide (Blaut 1993; Frank 1998; Lewis and Wigen 1997). In an era when Western globalization threatens Indigenous cultural identities (e.g. Smith *et al.* 2000), it is ironic that acknowledgement of the historical significance and impacts of ancient globalizations allows greater understanding and appreciation of the cultural uniqueness, adaptability, and resilience of peoples such as Torres Strait Islanders.

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4.5

Melanesian maritime middlemen and pre-colonial glocalization

Ian Lilley

Introduction

This chapter is about glocalization, or the globalization of the local. It concerns pre-colonial northwestern Melanesia and how agents both of globalization and of local identity sustained their own existences by manipulating the production and distribution of distinctive local products though systems of regional interaction and interdependence which might otherwise have been expected to diminish or eliminate local irregularities and homogenize cultures. These systems comprised webs of small-scale, politically autonomous communities articulated by specialized long-distance middleman traders such as the Siassi Islanders, who linked northeastern New Guinea with the western islands of the Bismarck Archipelago.

The noteworthy thing about these complicated systems was not that they existed at all in a social setting lacking any degree of political complexity as usually identified by hierarchies and the like. Rather, it was that they worked successfully because local interests varied rates and patterns of production to underpin overall network sustainability just as much as vectors of globalization manipulated the distribution of locally produced goods to the same effect. These processes saw local communities create mechanisms to ensure that traders visited regularly and predictably, while the traders who linked these communities exchanged goods such as pottery for low-value as well as high-value items in different places, thus enabling the conversion of one into the other between ports of call. Traders also encouraged seemingly redundant exchanges that resulted in goods such as dogs' teeth and pigs' tusks being imported by people who exported live dogs and pigs. The historical development of this interdependence of local and supra-local forces is the focus of this chapter. First, though, I will outline the basis of my perspective on globalization.

Globalization

My view of globalization derives from that of anthropologist Jonathan Friedman. He contends that 'the local is always an articulation between a specific historical and cultural and localized set of practices and its larger field of forces and conditions of reproduction' (2008: 118). In taking this cue, my discussion below challenges the exclusion from considerations of globalization situations like that in Melanesia, which I describe below because they are (1) historical/archaeological rather than contemporary or, more particularly, (2) are based in small-scale, non-state societies. This is because, as Rossi puts it, 'for Friedman [and anyone else attuned to an anthropological archaeological outlook], internal and external (global) relations have always been there as constitutive forces of social reproduction of a given society, so that globalization is not a new phenomenon' (2008: 10).

As implied in the opening chapters of the present volume, consideration of major works on globalization reveals that Friedman's outlook is not a common one, especially with regard to non-state societies not linked to large-scale capitalist or at least archaic imperial dynamics (e.g. Abu-Lughod 1989; Hopkins 2002; Jennings 2010; LaBianca and Scham 2006; Nederveen Pieterse 2009; Tomlinson 1999). From an archaeological perspective, Wilkinson *et al.* (2011) look back to the Bronze Age, broadly the same time depth as the early stages of the Melanesian case in focus here, but largely through a 'centre and periphery' prism not applicable in that case (e.g. their one chapter explicitly covering glocalization, Maran 2011). Indeed, as noted by a number of contributors to the present work (e.g. Robertson this volume), some scholars completely reject the idea that globalization 'proper' – that is, globalization like that which emerged post-World War II – was possible even in state-level societies if they developed earlier than or separately from the late medieval Italian city-states in which Western commercial capitalism first emerged after double-entry bookkeeping was borrowed from the Arabs in the early 1300s (Gleeson-White 2011). On that basis, they would exclude not just politically autonomous small-scale societies like the Melanesian example presented below, but also the archaic, historical and usually non-Western societies considered elsewhere in this volume as well as by the likes of historically or archaeologically oriented scholars such as Abu-Lughod, Hopkins, Jennings or LaBianca and Scham, or anthropologically trained researchers such as Nederveen Pieterse. Taking a lead from Giddens, Tomlinson is firm on this issue: 'whatever forms of "global interconnection" occurred before modernity [i.e. 17th Century Europe] did so in a context which makes them, in a sense, *incomparable* with globalization' (1999: 37, his emphasis; see O'Rourke and Williamson 2002 for an even more recent date for globalization's emergence).

Rossi has a more accommodating stance, recognizing different 'ideal types' of globalization 'or cross-societal ties' based on 'the circulation of cultural, political and economic capital' (2008: 30). Uncommonly in the context of the broader globalization literature, he deals at some length with societies such as those encompassed by the Melanesian trading systems under consideration in this chapter. These he calls 'cultural societies', or 'aboriginal societies . . . governed by kinship principles'. He uses the ethnographically described 'Kula Ring', mentioned again shortly, as his sole example of this 'ideal type' (2008: 31), although he is clearly thinking about the remote past as much as the recent ethnographic period. This is a matter to which I will return, but I note that Rossi calls the 'transcultural ties' amongst these sorts of societies 'cultural globalization', while at the same time acknowledging that such ties are not literally global.

Rossi distinguishes cultural globalization from 'political globalization', which he associates with 'the advent of civilization' and centralized authority (2008: 31). In this category he identifies the 'classic civilizations of Mesopotamia, Hindu, China, Mesopotamia [and] Andes [sic]'. He uses the term 'archaic globalization' to characterize the often very far-reaching webs of connection associated with this type of society. He recognizes though that archaic globalization still was not literally global 'because it did not reach America and Australasia' (2008: 33). These are the sorts of societies with which archaeological treatments of globalization conventionally deal, as is amply clear in other chapters in the present volume.

The third type of globalization that Rossi delineates is 'capitalist globalization'. Ironically, even though the activities of the seventeenth-century East India companies alluded to in the

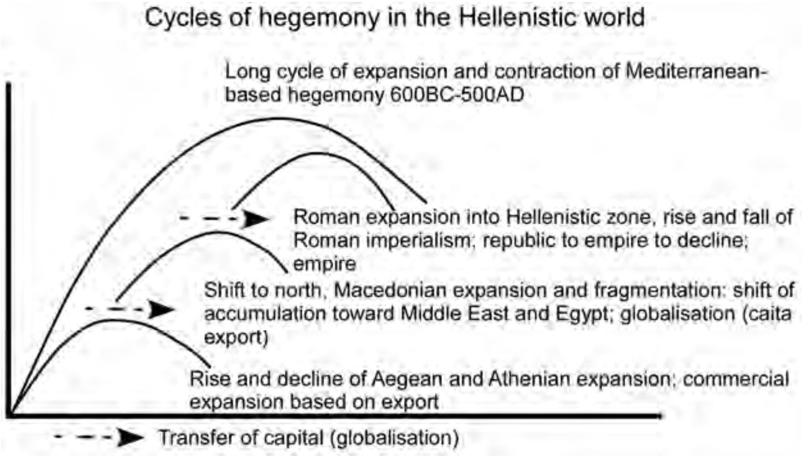
Cycles of hegemony in the Hellenistic world
Long cycle of expansion and contraction of Mediterranean-based hegemony 600BC-500AD
Roman expansion into Hellenistic zone, rise and fall of Roman imperialism; republic to empire to decline; empire
Shift to north, Macedonian expansion and fragmentation: shift of accumulation toward Middle East and Egypt; globalisation (caita export)
Rise and decline of Aegean and Athenian expansion; commercial expansion based on export
Transfer of capital (globalisation)

Figure 4.5.1 Friedman's model of cyclical change in Mediterranean hegemony (after Friedman 2008 figure 4.2, redrawn by Dan Rosendahl)

the discussion below seem to have had no impact on the 'cultural globalization' I am concerned with in New Guinea's Vitiaz region despite their relative propinquity, such companies were pivotal to the development of modern capitalism and its truly global reach (Rossi 2008: 35).

Rather than create different classes of globalization like Rossi, Friedman argues that the global is 'a purely structural concept' that arguably is 'as old as human social organization' (2008: 111). He takes a Braudelian historical perspective to assert that globalization is a cyclical phenomenon that expands and contracts, with globalization followed by 'deglobalization' (2008: 113). As an example, Friedman shows that such patterns can be discerned in the 'long cycle of expansion and contraction of Mediterranean-based hegemony 600 BC–500 AD' (2008: 112) (Figure 4.5.1). This is the same general pattern that Jennings describes in his introductory chapter in the present volume: a 'cyclical process in history within which bursts of interregional interaction were followed by balkanization' (p.12). As we shall see below, this general proposition and its visualization by Freidman differ only in degree rather than kind from some key arguments about broad historical patterns in coastal Melanesia.

And so to the islands

The long-distance interaction networks of coastal northwestern Melanesia have attracted scholarly attention for more than a hundred years. The best-known systems were around New Guinea (Figure 4.5.2). The most famous is the renowned trading 'ring' known as the *kula*, mentioned above as Rossi's ideal type of 'cultural globalization'. The *kula* moved elaborate shell valuables around the islands of the Massim, off southeastern New Guinea (Malinowski 1922). There were others along New Guinea's southeast coast between the Massim and the Gulf of Papua far to the west. East to west, these included the pottery trade centred on Mailu Island (Malinowski 1915) and the *hiri* network operating out of what is now Papua New Guinea's capital Port Moresby (Dutton 1982), which moved huge quantities of ceramics to people living around the Gulf of Papua in exchange for sago. On the northern side of New Guinea there were the Vitiaz Strait systems, including the one in focus in this chapter and operating out of the Siassi Islands (Harding 1967), and the Admiralty Islands trade described by Margaret Mead

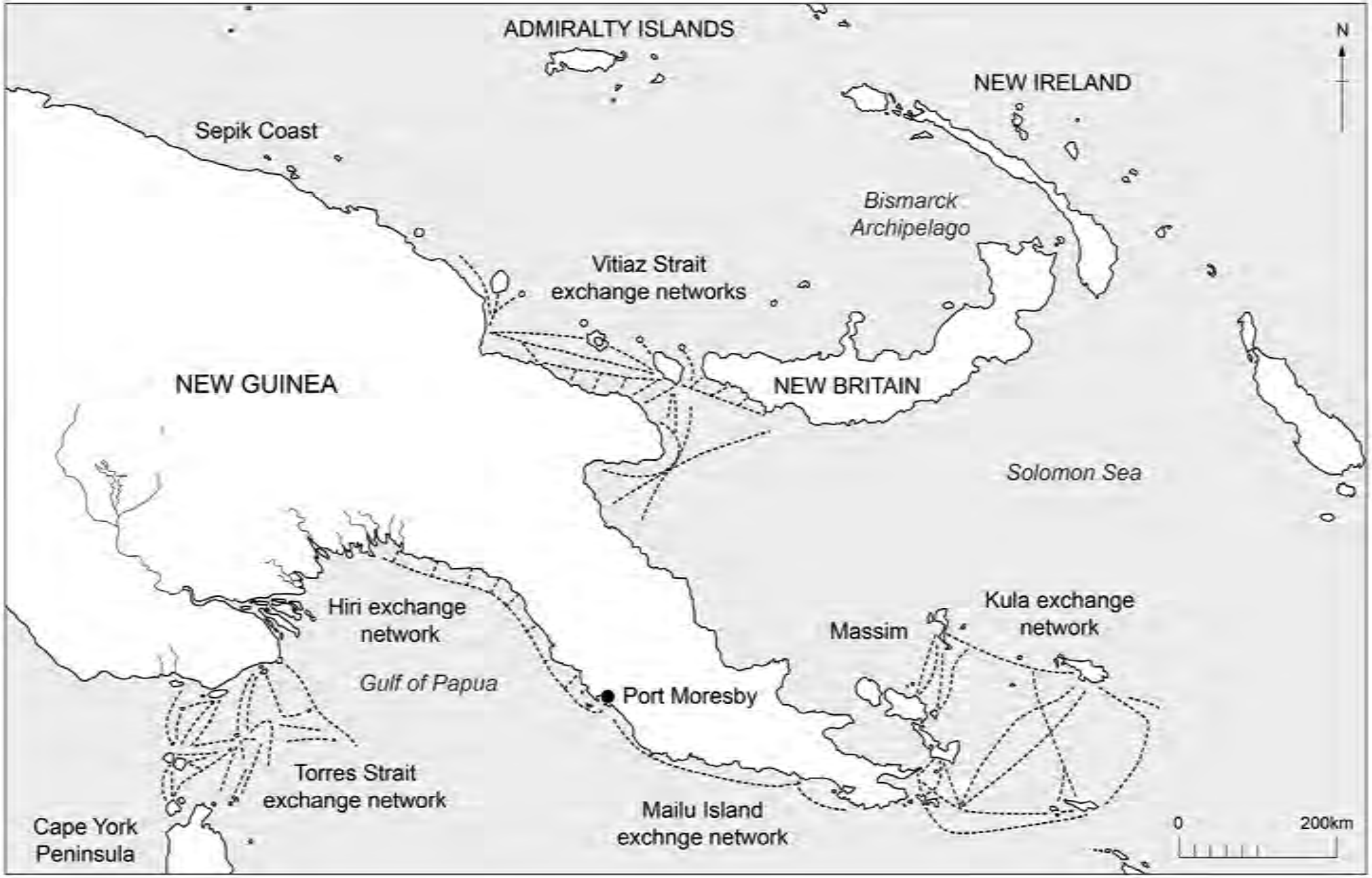

Figure 4.5.2 New Guinea coastal trading systems (after Skelly and David in press; redrawn by Michelle Langley)

(1930) and others. There were also many less well-documented networks, such as those within the Bismarck Archipelago and in the Sepik region, and the one linking southern New Guinea and Australia's Cape York Peninsula via the Torres Strait Islands (e.g. McNiven 1998).

The standing of these systems in anthropological theory stems from two main factors. First, each system comprised networks of small-scale, politically autonomous kin-based and technologically Neolithic societies. Many of these groups had proprietary rights within a particular network to produce specific craft items for exchange, such as pottery or certain kinds of valuables. As intimated earlier, in most cases the communities that imported these goods could have made such things for themselves. However, they were constrained by custom not to do so and so produced some other specialized good(s) for that system to help sustain a web of complementarity in exchange relationships. Usually these networks also included a few communities of specialist traders utterly dependent on exchange for survival. Historically, exchange systems configured in this way were seen to challenge prevailing social-evolutionary theory. Gordon Childe (1964: 68), for instance, believed that Melanesian specialists who manufactured pottery and transported it 'even across the sea' were modern-day exceptions to the 'rule' of Neolithic self-sufficiency and autonomy.

Unlike Childe, most researchers now see these Melanesian systems as typical rather than atypical of their time and place, and indeed some see even them as suitable analogues for aspects of prehistoric life elsewhere around the globe (e.g. Braun and Plog 1982; Ray 2004). This latter suggestion is methodologically indefensible (Spriggs 2008). Pacific archaeologists have been arguing against it for decades, not least because key elements of many aspects of Melanesian societies recorded by ethnographers have been shown by archaeological research to be products of recent colonialism rather than ancient patterns of behaviour.

The second factor underpinning the anthropological importance of Melanesian coastal trading systems is that although they enabled the movement of great quantities of food and raw materials, they are regarded as being internally integrated by 'ceremonial' or 'unbusinesslike' exchange motivated by the demands of political competition rather than by the forces of classical economics (e.g. Sahlins 1972: 185–314). This usually highly ritualized form of exchange is epitomized by the 'coals to Newcastle' (Fortune 1932: 205) *kula* trade in *Trochus*-shell armbands and *Spondylus*-shell necklaces in the Massim, where these items moved in counter-rotating cycles that ultimately delivered them back to the places which made them. In the Vitiaz Strait, it was the aforementioned opposing movement of live pigs and dogs on the one hand and pig tusks and dog teeth on the other (Harding 1967: 55, 241–44). More subtle instances entail the exchanges of food and other commodities necessitated by artificially constructed shortages (Beckett 1972: 318–19; Harding 1967: 91–98).

The contention that trade of these sorts is profoundly different from commercial trade was first put forward by the pioneering anthropologist Malinowski and in its broader application it is one of the cornerstones of substantivist economic anthropology (e.g. Le Clair and Schneider 1968: 3–13). Yet while all scholars of Melanesian coastal trade agree that such exchange had an integrative dimension, a question of further theoretical note is whether it was integration itself rather than more prosaic economic considerations (e.g. trade in food) that was the 'true' function of the networks. Malinowski and Fortune, for example, agreed that ceremonial exchange was non-economic and thus 'conceptually and behaviourally separate' (Leach 1983: 4) from utilitarian trade in food and so on. They saw the latter as a flow-on effect of the integration and peace maintained by trade. Harding (e.g. 1970: 110), the ethnographer of the Vitiaz Strait system, takes the contrary position, proposing that all the various forms of exchange encompassed by these networks – 'unbusinesslike' or not – were different kinds of, basically, economic activity which helped provision the societies involved.

The deep history of these networks began to receive attention from the 1960s, as archaeological interest in the Pacific broadened to include New Guinea and nearby archipelagos. Despite some 50 years of study, only a handful of researchers have been active. This means our knowledge of the prehistory of the region remains fragmentary and our understanding of the place of trading networks in that prehistory remains limited.

The problem

The debate surrounding the role of long-distance exchange in the broad sweep of coastal Melanesian history can be distilled into two competing notions. The first and, at its core, historically earliest, is that the development of the sort of trade in question – amongst other things – originated in contact between migrating speakers of Asian Austronesian languages and existing non-Austronesian-speaking Melanesian populations (e.g. Harding 1967: 238–51). In this view, Austronesian-speakers introduced a bundle of cultural novelties such as pottery, ocean-going watercraft and weakly hierarchical leadership frameworks. This process was initiated about 3,300 years ago, when Austronesian-speakers began migrating through Melanesia *en route* from southeast Asia through the already occupied islands of 'Near Oceania' – the region extending out to the end of the main Solomons chain – and then into the previously uninhabited vastness of 'Remote Oceania' (the rest of Melanesia and Polynesia). These Austronesian-speakers are characterized as creators and bearers of the 'Lapita Cultural Complex', which is typified by unique 'Lapita' pottery and an array of other material characteristics (discussed by Sand this volume; see also Bedford *et al.* 2007; Bellwood *et al.* 2006; Kirch 1997; Spriggs 1997).

The contending proposition is that developments in Melanesia, including the emergence of complex long-distance exchange networks, result from very long-term patterns of change. Those behind this alternative accept that pottery technology and perhaps even certain sociocultural institutions such as political ranking were introduced by Austronesian-speaking people from the west but reject the notion that such introductions were 'either revolutionary or revelational' (Allen 1984a: 187). Instead, supporters of this position propose that Lapita and more recent long-distance exchange systems emerged from webs of artefact and raw material transfer which have operated since at least the early Holocene or terminal Pleistocene (e.g. Torrence *et al.* 2013; Torrence and Swadling 2008; see Spriggs 2011 for a strong rejoinder).

It is likely that whether caused primarily by migration or local development, the unambiguous change in coastal and island life reflected in the sudden appearance of Lapita pottery in a hitherto aceramic cultural landscape was directly tied with the catastrophic eruption of the Witori volcano on the central north coast of New Britain about 3200 years ago (Petrie and Torrence 2008). This was one of the biggest eruptions in earth's history and apart from any other impacts would have dramatically affected access to some of Melanesia's major obsidian sources. These sources were key to earlier trade networks extending all the way to Island Southeast Asia and it is unlikely to be a coincidence that the abrupt interruption of obsidian supplies to these systems saw people (i.e. Austronesian-speakers) moving from the destination areas to the source areas at this time (Lilley 2000, 2004).

When I began working on New Guinea coastal trade in the early 1980s, only exploratory archaeological work had been undertaken on the north coast of New Guinea and adjacent archipelagos. Since then, the likes of Gosden (e.g. 1989), Summerhayes (e.g. Summerhayes *et al.* 2014), Torrence (e.g. Torrence and Doelman 2007) and Terrell (e.g. Terrell and Schechter 2007) have been active in the region. All of these projects considered questions relating in one way or another to the development of long-distance maritime trade.

In contrast to this situation, by the mid-1980s there had been numbers of detailed archaeological studies focussing wholly or in part on long-distance exchange along the southeast coast of New Guinea and in the Massim (e.g. Allen 1977a, b; Bulmer 1982; Egloff 1978; Irwin 1985; Rhoads 1982; Vanderwal 1978). More recently, even more work has been undertaken across this region (e.g. Bickler 2006; David *et al.* 2011; Frankel and Rhoads 1994; Negishi and Rintaro Ono 2009; Skelly *et al.* 2014). It is this body of work rather than that on the northern side of New Guinea that is most relevant here.

There is evidence for occupation of the present south coast by aceramic peoples dating from *c.*4,000 years ago. Until very recently, no evidence for Lapita pottery had been discovered on the south coast and the first ceramics were thought to be Lapita-related material dating from about 2,000 years ago. The appearance of this pottery coincides with a substantial westerly movement along the coast of obsidian from Fergusson Island in the Massim. It is now known that Lapita ceramics and Fergusson obsidian were present along the south coast from around 2900 BP (David *et al.* 2011; McNiven *et al.* 2012; Skelly *et al.* 2014). Little is known at this early stage of investigation about the people who used this Lapita, but the Lapita-derived pottery which appears around 2000 BP may well be a local rather than an exogenous development as has hitherto been thought, though the latter remains a possibility. In any event, the south coast potting communities began to diverge during the first millennium CE, but they remained in contact and followed parallel trajectories of gradual development.

Skelly and David's (in press) results lead them to argue that 'these cultural transformations . . . have been seriously underplayed in the literature', but they agree with previous work that there was a widespread depositional discontinuity some 800 years ago which is manifested differently in different areas (and thus was a little older or younger than 800 BP in particular cases). Following this 'hiccup', contact between the potting communities diminished and ceramic styles started to differ significantly. Long-distance trade then began to intensify, partially reintegrating at least some of the south coast potting groups, but the ethnographically documented configurations of the trading systems around Port Moresby, Mailu and in the Massim did not appear until around 500 years ago.

Arguing on the basis of ethnographic analogy, Allen hypothesizes that his excavations on Motupore Island near Port Moresby show the catalyst for post-1000 BP developments in the area to have been an immigration of specialist maritime traders from an unknown location further east. He postulates (1977b: 395) that their specialization allowed them to occupy resource-poor but strategic locations such as Motupore and to integrate rapidly with existing trade networks, in this way bringing a 'higher order complexity' to local socioeconomic systems which accelerated their development. He contends (1977b: 398–408) that this overloaded the economies and triggered a collapse of trade some 200–300 years ago. After that, the traders moved west and began again, initiating the ethnographically described *hiri*.

In contrast to Allen, Irwin (1985) posits that varied archaeological changes evident on and near Mailu Island about 1000 BP reflect the unaccompanied diffusion of new ceramic styles into the area rather than population movement. On these grounds, he hypothesizes that Mailu's emergence as a major trading and manufacturing centre can be explained largely in terms of local processes. The interrelated processes to which he attributes the greatest weight include variables such as location, increasing centrality in local interaction networks, monopolies on pottery and canoe production, and eventual dominance in warfare.

The locality specific models developed by Allen, Irwin and others are still the focus of scholarly dispute. In addition to any other concerns, there remains the question of whether these models can be adapted to explain events and processes in neighbouring areas. Allen (1985, 1984b) developed a general model of the development of Papuan coastal trading systems which

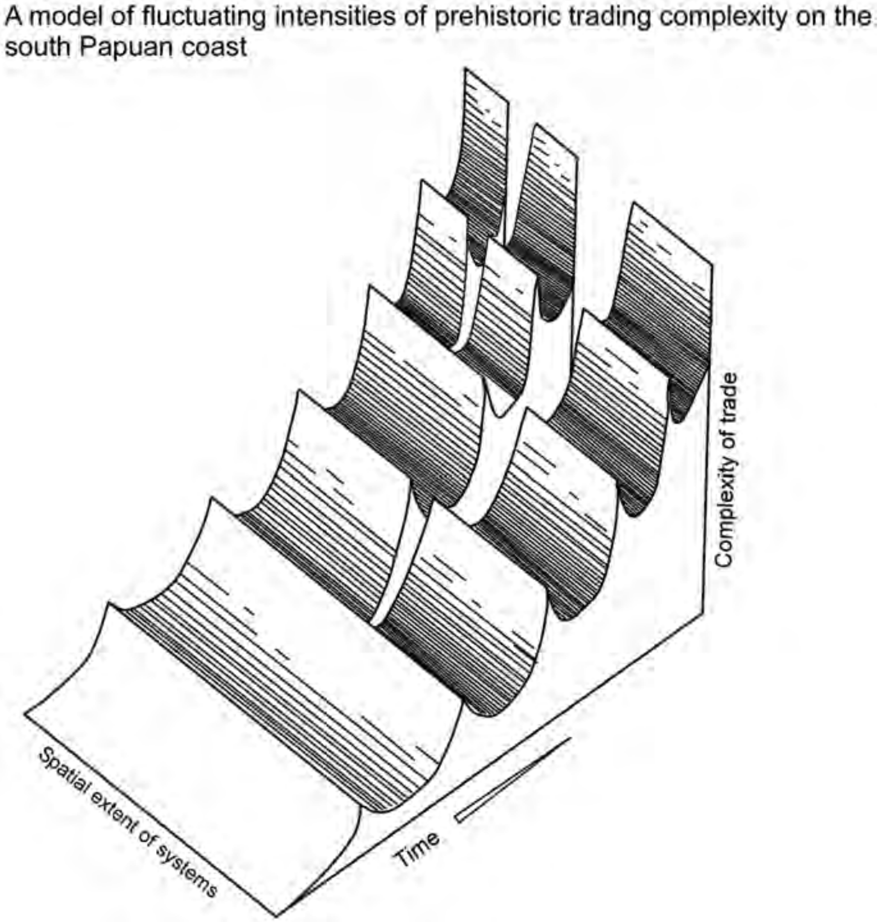
A model of fluctuating intensities of prehistoric trading complexity on the south Papuan coast
Complexity of trade
Spatial extent of systems
Time

Figure 4.5.3 Allen's model of varying complexity in prehistoric trading networks on the Papuan south coast (after Allen 1985 figure 1, redrawn by Dan Rosendahl)

is yet to be challenged by more recent work. Drawing heavily on his arguments regarding Motupore, he tenders a model which begins with an areally extensive but organizationally simple system which, through a series of systemic collapses, splits into an increasing number of more localized but organizationally increasingly complex systems (Figure 4.5.3).

Ironically, despite Allen's central role in developing the idea mentioned earlier that Lapita built on existing local patterns, he equates the initial system in his general model with a Lapita rather than a pre-Lapita exchange network, intermediate states with the breakdown of that Lapita network and the most localized and complex networks with ethnographically documented systems. Irwin's position (1985) appears to be that a formal model like Allen's cannot accommodate the variability in the southern Papuan cases he has investigated. Like Allen, though, he recognizes that 'the next logical step is to try to integrate some . . . [other] places and cases in a more general explanation of change' (1985: vii). That is what my work in the Vitiaz Strait was intended to do.

The Vitiaz Strait

The myriad small-scale societies of the wider Vitiaz region were part of an extensive and complicated sociocultural 'super-system'. In some respects, this super-system encompassed the entire northern seaboard of mainland New Guinea from west of Astrolabe Bay to the southern margins of the Huon Gulf, some 500 km distant, as well as the whole of western New Britain, and all of the islands in between (Figure 4.5.4). Other facets were restricted to a handful of communities.

The characteristics of the ethnographic super-system make it difficult to consider its constituent parts in mutually exclusive terms. It is usually divided into three elements that are best thought of as overlapping and interconnected spheres of interaction. Each system was composed of numerous small-scale vertical trading webs which linked horizontally to form a series of dendritic networks (Figure 4.5.5). In Harding's (1967: 16) terms, in order of increasing proximity to the coast, these networks included a base of one or more 'interior ethnic blocs', a second level of 'hinterland middlemen' and an apex of one or two 'port communities'. Individual communities in these networks produced goods for trade ranging from ordinary foodstuffs to highly specialized craft goods such as ceramics, the latter being made only in a handful of recognized coastal production centres. Each of these potting villages turned out enormous quantities of trade ceramics, which although not wheel-thrown and only low-fired, were highly standardized and very finely made (pot bodies were consistently only a few millimetres thick). Groups of vertically integrated dendritic networks in different areas were connected by specialist overseas traders to form the three overlapping interaction spheres mentioned above.

The three systems are usually named after the three groups of specialist long-distance maritime traders who used huge sailing canoes to service the region. From west to east, the Bilibili system was centred on Astrolabe Bay (Lawrence 1964: 19–24), the Siassi system spanned the Vitiaz and Dampier Straits between New Guinea and the Bismarcks (Harding 1967) and the Tami system operated mainly in the Huon Gulf (Hogbin 1947). The Bilibili were specialized potters as well as traders, making unmistakable 'Madang' pottery (Madang is a nearby modern town). The Siassi did not make pottery, but rather moved equally distinctive trade pottery made by specialists at Sio on the New Guinea mainland. Similarly, although renowned for their beautiful carved wooden bowls, the Tami did not make pottery, instead trading in a third style of trade ceramics made in villages on the south coast of the Huon Gulf.

The core zones of the Siassi, Bilibili and Tami systems can be seen in Figure 4.5.4. The outer reaches of each system are harder to delineate. On the New Guinea mainland they mostly map onto major drainage divides, but goods unquestionably also moved across the ranges in both directions (e.g. Hughes 1977). Of the three systems encompassed by the super-system at contact, the Siassi network was the only one to withstand the effects of European colonization for any length of time and so is the only one well documented by modern anthropologists.

How did the Vitiaz trading systems arise? In 1983–84, I conducted the first archaeological work in Siassi, excavating sites KLK on Tuam and KLJ on Malai. Following the 1984 season in Siassi, I moved to Sio on the New Guinea mainland to excavate two sites located by Specht (1973) a decade earlier: the large and highly disturbed shell middens of the KBP site on tiny Sio Island, and the series of mounds forming the KBQ site on the adjacent mainland (Lilley 1986, 2004, 2007; Lilley and Specht 2007; Specht *et al.* 2006).

Although neither is continuous, the Siassi and Sio sequences can be amalgamated to model the development of regional trade from about 3,000 years ago to the early colonial period (Figure 4.5.6). As Harding (1967) surmised in his *Voyagers of the Vitiaz Strait*, the oldest evidence for long-distance exchange in the Vitiaz region dates to Lapita times, in the form of a

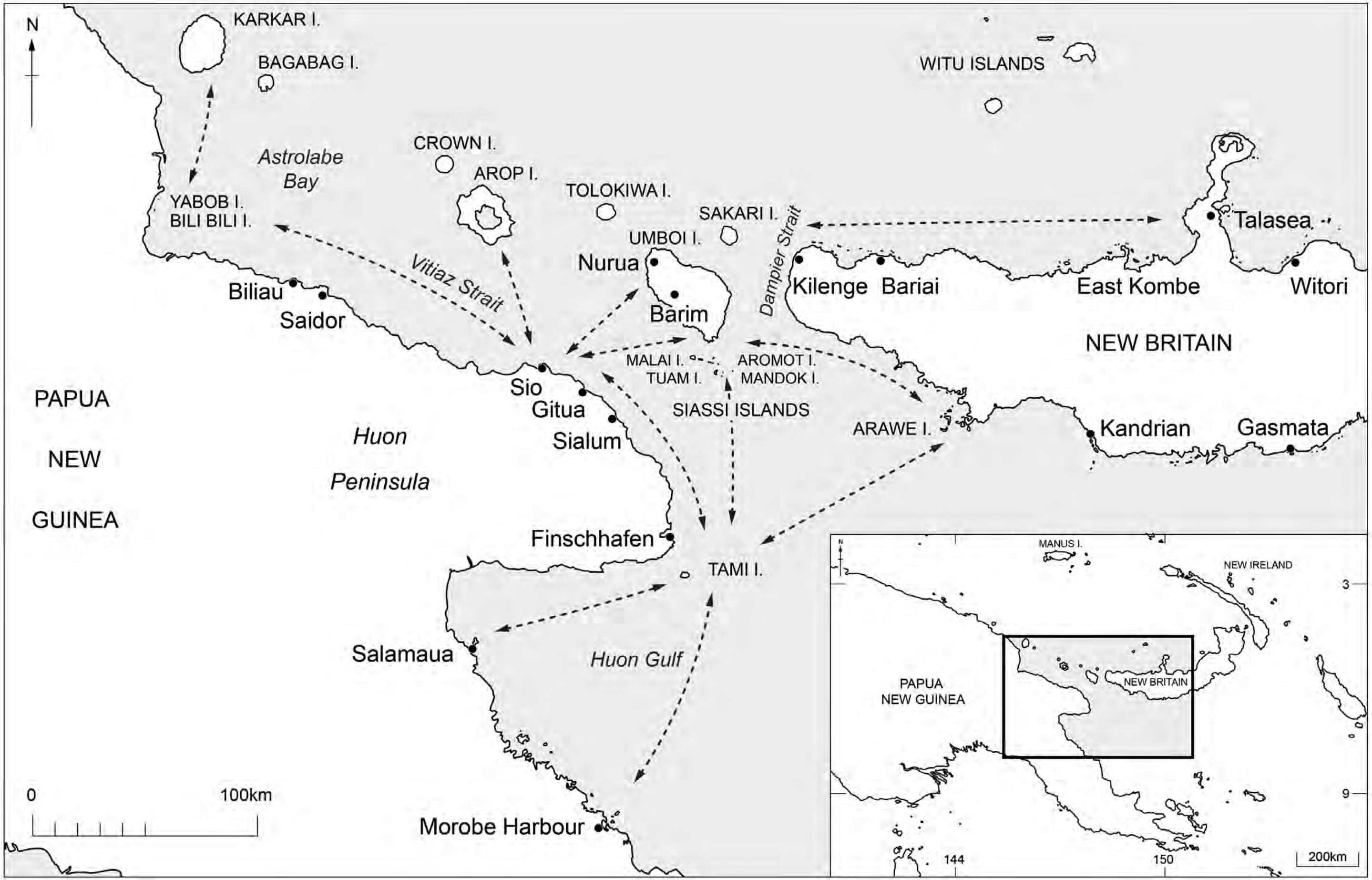

Figure 4.5.4 The wider Vitiaz Strait region showing major trade networks

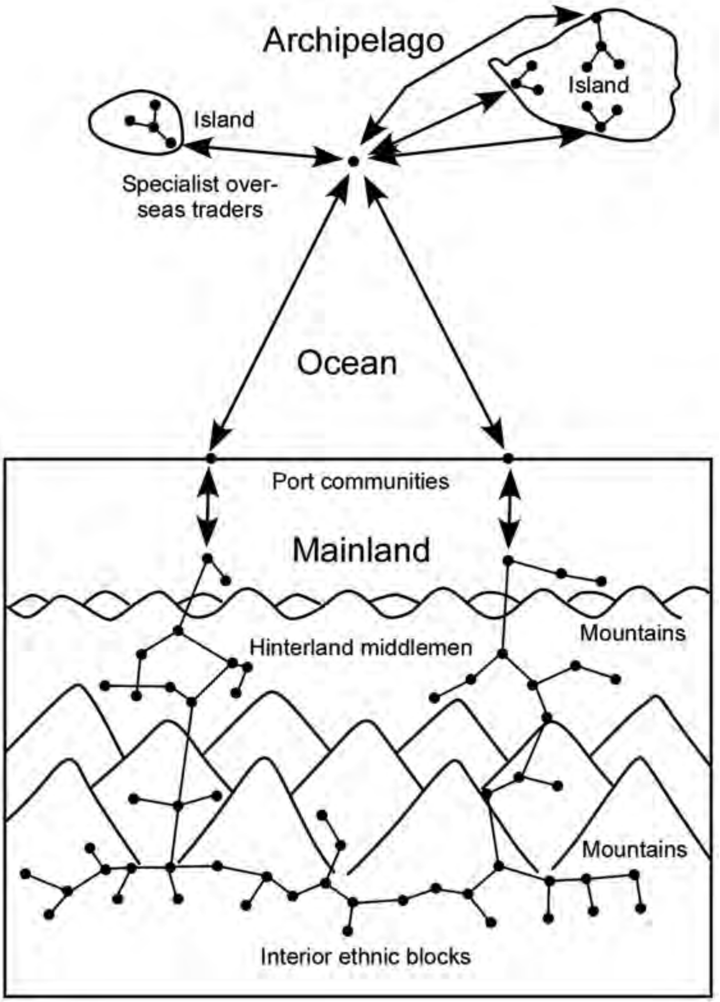

Figure 4.5.5 Idealized structure of mainland trading networks (adapted from Harding 1967 and Lilley 1986)

Lapita presence on Tuam some 3,150–2,750 years ago. The Lapita levels contain nothing of New Guinea mainland origin. This means there is no evidence for any cross-strait movement of goods at this time, including pottery, and thus that the two-way cross-strait exchange which underpinned the historically documented trading system did not originate directly in Lapita trading patterns. In addition, the Lapita exchange system (and indeed evidence for human occupation of any sort) vanished about 1,000 years before the emergence of an exchange network which is undoubtedly ancestral to the system described by Harding.

The appearance of a 'proto-system' of long-distance trade around 1,700 years ago is marked by the sudden appearance of, at first, two quite dissimilar styles of pottery, then a third and slightly later a fourth style, as well as the first evidence for the movement of ceramics, obsidian and most likely chert across the Vitiaz Strait. The first pottery styles were 'Ancestral Sio' and 'Type Y', followed about 1,300 years ago by 'Ancestral Madang' and then perhaps 1,000 years

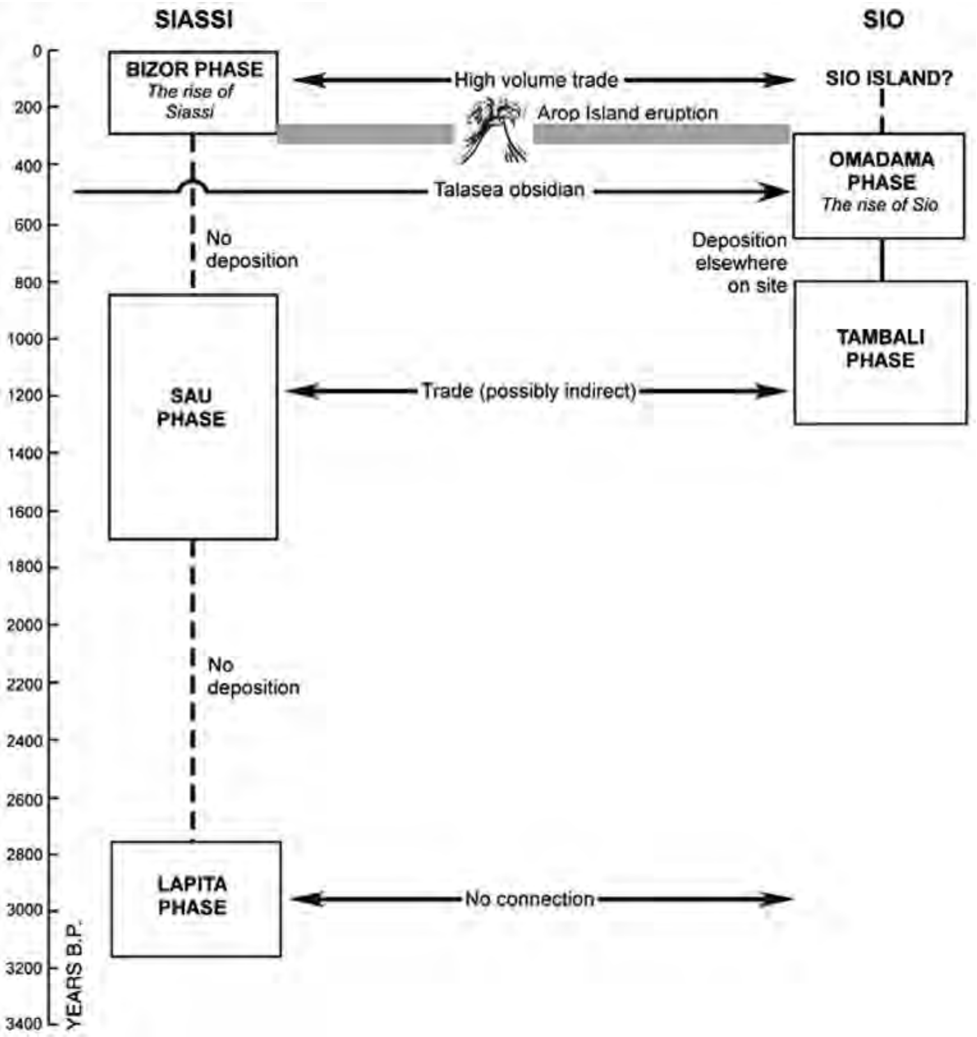

Figure 4.5.6 The emergence of the Siassi trading network (from Lilley 1986)

ago by 'Type X'. Little is known of either Type X or Type Y, especially the latter. The former is highly distinctive, quite widespread across the region and may have been produced on the Huon Peninsula (Lilley 2004; Lilley and Specht 2007; Specht *et al.* 2006). Although stylistically and petrographically completely different from each other, each of these four early wares was quite variable and none exhibited any signs of standardized, high-volume production for trade.

That the ethnographically-described exchange network emerged from this proto-system is demonstrable from clear continuities in most aspects of material culture and in the stability of local subsistence strategies as revealed by faunal analysis. However, there are several noteworthy differences between the proto-system and the ethnographic system. The most important in the present context is that the configuration of pottery manufacture and movement was markedly divergent.

Site KLK in Siassi was abandoned from about 1000 to 500 BP (Lilley 1986: 61), but at Sio on the mainland, there are unambiguous signs that several important developments occurred at some stage between about 800 and 650 BP, even though no deposits dating to this critical period have been excavated in the Sio area (Lilley 1986: 71–72; Lilley 1988: 97–98). Most notably here, excavations in more recent deposits on Sio Island show that between 650–300 BP Sio ceramics attained high levels of intensity and specialization of production like those witnessed historically. At the same time, increasing amounts of obsidian began reaching the site from Talasea on the north coast of New Britain (Lilley 1986: 355–57).

Despite these important shifts on the New Guinea north coast, and sparse evidence for a human presence in Siassi from around 550 BP, there is no indication of more than passing visits to Siassi or of a resumption of cross-strait trade until about 300 BP, when deposition accelerated at site KLJ on the island of Malai, adjacent to Tuam in Siassi (Lilley 1986: 67–68). In other words, an overall intensification of activity, perhaps accompanied by other significant changes, started in the Sio area almost 400 years before the emergence of an exchange network patterned like that recorded by Harding.

There is no excavated evidence from Sio to cover the last 300 years, and the focus of local occupation seems to have shifted to Sio Island during this time (Lilley 1986: 68). However, there is a dramatic upswing in the quantities of highly standardized Sio trade pottery deposited on Malai during this period (Lilley 1986: 297–301). This clearly indicates that there was a marked increase in the quantity of mainland New Guinea pottery moved across the strait. This suggests in turn the possibility of greater intensification of production at Sio. The Malai material also indicates that most of the Madang ceramics that were excavated there was transported across the strait in historical times. Like Sio ware, this material had also become highly standardized in comparison with earlier 'Ancestral Madang' pottery. These developments coincide with increased deposition of a much-expanded array of utilitarian artefacts and faunal remains and the first appearance of valuable manufactures in the Siassi Islands.

In sum, while a shift to specialist production of trade pottery had occurred in the Sio area by about 650 BP, the excavated data suggest that the production of Sio pottery and cross-strait trading did not reach the levels of intensity recorded ethnographically until some centuries later – around the time that the first European known to have visited the area, the Englishman William Dampier, first entered the Vitiaz Strait in 1700 CE (250 BP).

In general terms, I agree with the recognition that key elements of 'traditional' Pacific culture recorded in classic ethnographies were actually the product of European colonialism (e.g. Spriggs 2008). Yet there is no evidence to suggest that Dampier – or any other Europeans who sailed through the Vitiaz region after him – had anything to do with the developments I have outlined above. Nor is there anything to indicate the involvement of the Europeans who since the late sixteenth century CE had been active in the 'East Indies', immediately west of New Guinea. We know that Iberian traders brought the South American sweet potato (*Ipomea batatas*) to southeast Asia 'the long way round' across the Atlantic and Indian Oceans in the seventeenth century, and that the crop quickly diffused into New Guinea – especially via the west–east highlands running along the centre of the island – via traditional exchange systems. However, there is no sign that true highland societies in the central cordillera rather than people in the coastal ranges were connected with the coastal trading networks of concern here, or that the appearance of the sweet potato had the great impact on coastal societies that it did in the highlands (Ballard *et al.* 2005). In sum, early European globalization was not a factor in the emergence of the Siassi trading system. Nor is there any indication that Asian empires reached this far east at this time or earlier (Swadling 1996).

The changes in the Vitiaz region from *c.*1700 CE are more likely connected with a cataclysmic eruption on nearby Arop/Long Island just after Dampier sailed through the area.

The eruption caused the extensive 'time of darkness' identified by Blong (1982) and is probably implicated in Sio stories of a sorcery induced calamity that led people to move from the mainland to Sio Island. As was true of the Witori eruption in New Britain immediately before the appearance of Lapita, the Arop event resulted in widespread disruption and population dispersal, which in turn necessitated a rearrangement of regional interaction networks (Lilley 1986: 476–78).

Back to general models

If we return to Friedman's diagram (Figure 4.5.1, p.337), it is not dissimilar in its conceptualization to the one created by Allen to describe the trajectories of change in interaction networks in coastal Melanesia (Figure 4.5.6, p.346). The two charts are drawn differently and Friedman's concerns are what Rossi calls 'political' or 'archaic' globalization rather than 'cultural globalization' of the sort we have been considering in Melanesia, but the resulting pictures convey the same overall message: patterns of supra-local connectivity wax and wane through time, within an overarching trajectory of increasing complexity and intensity.

How might such 'boom and bust' models apply to the Vitiaz Strait? As would be expected from Allen's conceptualization, the evidence from Siassi indicates that a Lapita presence underwrote later developments, and that, as modelled by Allen, whatever regional network is represented by Lapita broke down. After the Lapita period, there was what Friedman's model would characterize as a contraction, perhaps resulting in something like the 'balkanization' invoked by Jennings (this volume). A whole millennium passed before the next stage of expansion occurred in the Vitiaz Strait, this time exhibiting increased reach and complexity in the form of cross-strait movement of goods and more than one type (and ultimately four kinds) of pottery. This nascent version of the ethnographic super-system also came to an end, again in a period for which there is still no archaeological evidence. Interestingly, this 'bust' is chronologically coincident with the 'hiccup' in trade along the south coast of mainland New Guinea, but at this stage there is no way of knowing if the two are connected by more than coincidence.

After this hiatus there emerged a significantly more complex system, or, more exactly, set of systems. These networks entailed much-intensified trade and the manufacture not only of highly uniform trade pottery but also of the first archaeologically visible valuables, the latter perhaps marking the appearance of the political status rivalry – 'bigman politics' – typical of the ethnographic period. There was then another far-reaching shift. Although coincident with the dawn of the European colonial era in the region, this change is more reasonably linked to regional social and demographic corrections following the eruption of Arop/Long Island. It is in this final expression that we first see all the pieces of the ethnographically described system in play. This pattern of change through space and time is not precisely the same as those predicted by either Allen's or Friedman's models, but it unquestionably follows the same overall trajectory as both.

Glocalization

So why should any of the foregoing patterns in the Vitiaz region be characterized as examples of glocalization? Friedman would probably argue that the idea is not applicable in this instance. He is not enamoured of glocalization, or rather of what he sees as the misinterpretation and misuse of the concept. He reminds us that it 'comes from Japanese marketing discourse, [and] concerns the globalization of the local (e.g. the making of home abroad (for the Westerner) in international hotels)'(2008: 118–19). To quote Roland Robertson, who introduced the term to globalization scholarship, glocalization refers to 'the tailoring and advertising of goods and services on a global or near-global basis to increasingly differentiated local and particular markets . . . [and] involves *the construction* of increasingly differentiated consumers, the "invention" of "consumer traditions"' (1995: 28–29, his emphasis).

I contend that although the origins of the term lie in the world of modern capitalist marketing, it is useful in our attempt to understand the situation in Melanesia. The Lapita system appears to have been relatively 'closed' socially (see Sand this volume). Although Lapita pottery and other characteristic elements of the Lapita cultural complex are found over a vast area, the messages conveyed by Lapita motifs were directed at insiders, that is, culturally relatively homogenous 'Lapita people', rather than helping to take Lapita as a locally produced product to the wider world beyond Lapita society. This situation changed, though perhaps only slightly, when the embryonic regional super-system first appeared in the Vitiaz area 1,000 years after Lapita disappeared. Traders were taking local products from their local settings to far-off locations, to the wider world as they knew it, but not at levels of intensity that required any transformation of local production processes. The local goods were thus not yet 'glocalized', even if they were being moved to culturally diverse end-users, often at considerable distances from where those goods were made.

The situation changed dramatically in Siassi with the appearance after the hiatus of the penultimate regional network. The diversity and volume of trade increased radically and particular craft goods – most notably pottery – were unambiguously now being made specifically for overseas trade. These trade ceramics remained unmistakably identifiable to their local sources – indeed, standardization represented the pinnacle of local identity in ceramic form – but in this very standardization they were also very obviously produced by mechanisms designed to maximize 'global' distribution and consumption. As I see it, this late prehistoric shift is an excellent example of glocalization, or 'globalization of the local'.

Discussion and conclusion

Even though concepts such as globalization and glocalization are not conventionally associated with small-scale non-state societies, I believe the foregoing discussion shows that such ideas are of value in considering these sorts of situations. Such instances of 'cultural globalization' are not literally global in extent, as Rossi reminds us, and thus are obviously not the same as the 'political globalization' of archaic states and empires, much less the 'economic globalization' of the modern world. Yet the core principles of globalization and glocalization as types of social phenomena are generically similar across all these categories.

Using these concepts not only adds usefully to our understanding of the Melanesian situation, but also enlarges high theory by adding an archaeological dimension from deep time to the observations of historically *and* anthropologically aware scholars such as Rossi and Friedman. Both already encompass archaeology by implication, while Rossi – uniquely in the globalization literature as far as I can determine – also explicitly mentions Melanesian coastal trade in the form of the ethnographically described *kula*. In this chapter I have built on their work to present archaeological evidence regarding Melanesian coastal trade, rather than an ethnographic substitute in the way that Rossi has done with the *kula* in precisely the manner that is questioned by Spriggs (2008). As Spriggs asserts,

> if we want to compare pre-colonial forms of life, we have to engage with the precolonial situation. There are no ethnographic parallels . . . that will ever allow us to do it without the addition of an archaeology that comments on the time and situational specificity of the ethnographic examples.
>
> *(2008: 548)*

It has to be asked why many scholars of globalization are so reluctant to concede that the processes that concern them have been around since the beginning of ‘human social organization’, as Friedman puts it. Part of the problem is undoubtedly the fact that unlike Friedman or Rossi, who explicitly engage with the deep past in small-scale, non-Western contexts, most scholars in the humanities and social sciences, and indeed in the academy more broadly, simply do not see archaeology as something they need to take into account. In this connection, Meskell declares, ‘the omission of an archaeological contribution is more revealing about a broader scholarly reticence to engage with the messiness of things, their fundamental embeddedness, and their myriad historical residues and entanglements’ (2013: 92).

My underlying motivation in contributing to the present volume was to bring some archaeological findings to bear not only on the question of whether globalization and glocalization could be identified in the deep past, and outside of the influences of conventionally recognized agents of globalization in state-level societies, but also on this other question that Friedman raises. While it would be ridiculous to claim that there are no differences between the modern and pre-modern worlds, or in that context between the various sorts of globalization distinguished by Rossi, I am keen to show that in the broad view, globalization can be seen in Siassi as much as it can be seen in the other examples canvassed in this volume.

At root this is because the archaeological record demonstrates that the communities I work with in Melanesia are not ‘people without history’ (Wolf 1982), and it is here I take issue with Rossi. Despite his avowals that his ‘ideal types’ of societies (cultural, political and economic) are not evolutionary stages, they are quite evidently just that: he calls ‘cultural societies’, for example, a ‘stage of societal development’. By presenting the ethnographic *kula* as an exemplar of an early stage in the evolution of Western capitalist globalization, he is unequivocally implying that *kula* societies in the ‘ethnographic present’ (i.e. the recent colonial past) ‘existed outside the realm of world historical experience’ (Peterson 2000: 27). That is plainly not the case, as I hope I have shown.

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4.6

Disentangling the Lapita interaction spheres

The global, the provincial and the local

Christophe Sand

Introduction

Comparing archaeological artifacts in the Musée de l'Homme in Paris at the end of the 1940s, geologist J. Avias observed identical prehistoric pottery in similar types of seashore locations on the island of Watom (Papua New Guinea) and in New Caledonia (Isle of Pines). This led him to argue that,

> we can deduce that with a probability close to certainty, the same human group (in an ethnic sense) has stopped or has sojourned in these two locations of the Pacific, although these are a couple of thousands of kilometers apart. . . . [T]he pottery civilization of Vao (Isle of Pines) may be related to some pots from Foué near Koné.
>
> *(Avias 1950: 132–36)*

By noticing by chance the stylistic relationships between three pottery collections from two Pacific archipelagos 3,000 km apart, Avias was probably the first to identify in writing what has become one of the most debated pages in the long history of Oceania. The Lapita icon (Figure 4.6.1), with its intricately decorated pots produced about 3,000 years ago over the entire southwest Pacific, from the Bismarck Archipelago to the remote archipelagos of Samoa and Tonga in Western Polynesia (Figure 4.6.2), has been the central focus of archaeological research in this part of the world for the past half-century. Field data from pottery typologies to obsidian sourcing, associated with input from linguistics and anthropology, have allowed us to paint a picture of highly interconnected communities linked through long-distance interaction spheres as a major globalization in world prehistory (Figure 4.6.3; see also McNiven this volume).

Studies on the concept of globalization in world history, first applied to the European colonization process of the last five centuries (O'Rourke and Williamson 2002), have been taken over by historians and archaeologists to be tested in contexts of regional connectivity in earlier periods. Using the general definition that "globalization has to be understood as a dialectical phenomenon, in which events at one pole of a distanciated relation often produce divergent or even contrary occurrences at another" (Giddens 1991: 22), archaeologists have stressed how

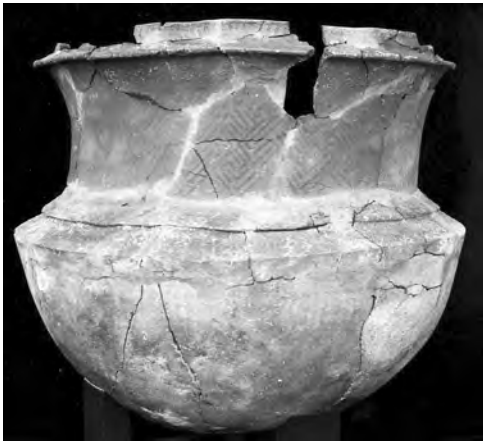

Figure 4.6.1 Reconstructed Lapita pot from the eponymous site of Lapita (WKO-013), New Caledonia (photograph by author)

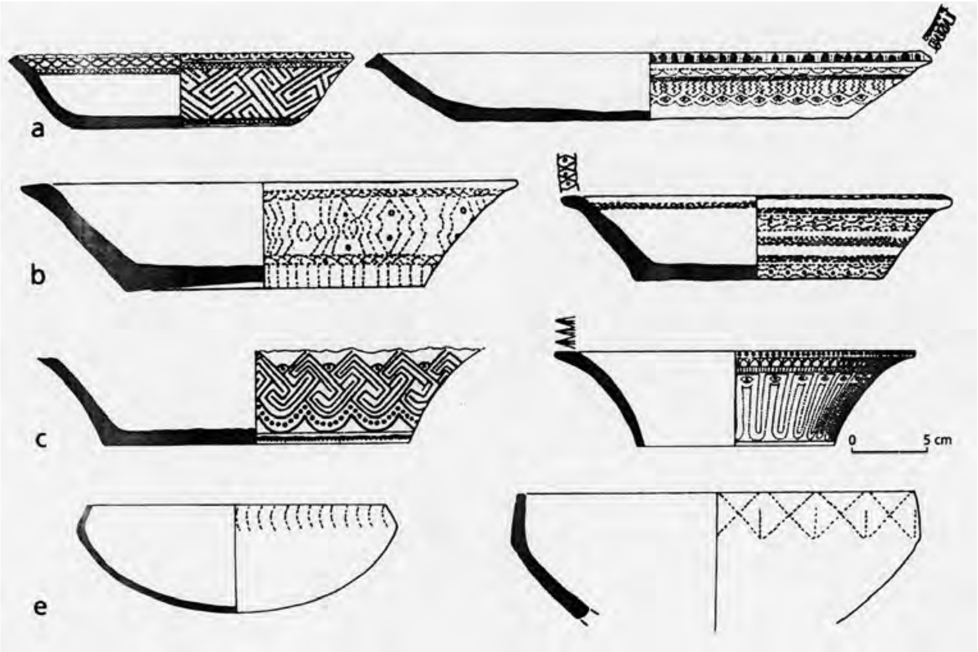

Figure 4.6.2 Selection of Lapita ceramic forms and decorations (drawing by author)

much, for our discipline, "a basic definition of globalization requires strong connections forming dense networks" (Knappett this volume).

In the volume's framework of case studies on globalization and its archaeological signatures, this chapter presents a general overview of the most recent discoveries and hypotheses regarding the "Lapita Cultural Complex," an inclusive term that emphasizes the highly-connected aspects of the tradition and underlines its globalized characteristics. The Lapita dispersal across

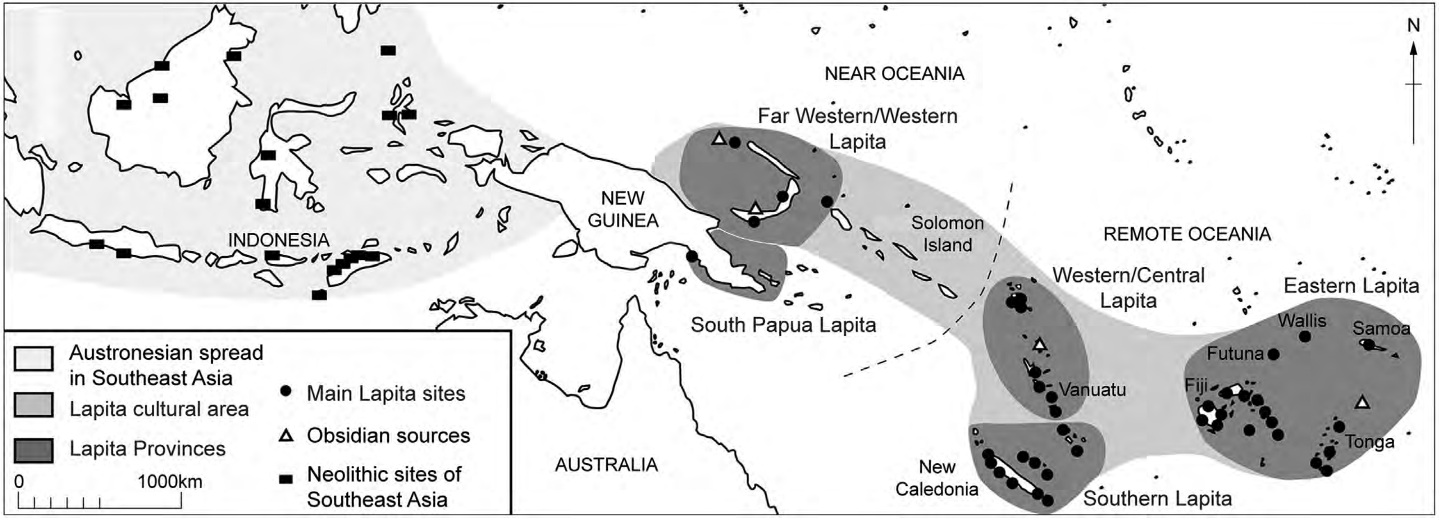

Figure 4.6.3 Map of the Pacific showing distribution of the Lapita Cultural Complex

the southwest Pacific some 3,000 years BP is linked to the expansion of Austronesian-speakers, a wider globalizing front out of Asia about 4,000 years ago. The Lapita Cultural Complex is expressed in related sets of pottery, non-ceramic productions, settlement patterns and economic data. The globalizing connectivities of the Lapita phenomenon can be illustrated though charts and maps showing the ties that linked sites over very long distances, but also illustrating regional decay processes (see Green 1979 for a pioneering example). Contrary to most cases studied by archaeologists, the Lapita complex encompasses the first human colonization over more than 3,000 km of previously uncharted ocean. This gives archaeologists a unique opportunity to study globalization processes as reflected in long-distance networks and their transformation in a circumscribed and short-lived prehistoric tradition in a previously uninhabited region.

The first part of the chapter examines in detail the different types of interaction spheres that archaeology is able to reconstruct for the cultural complex. This will then allow discussion of the different levels of connectivity at the global, provincial and local levels, helping to disentangle the complexities of the Lapita Cultural Complex as a global phenomenon.

Lapita interaction spheres in time and space

Lapita origins revisited

Paradoxically, the question of Lapita origins remains one of the least well-understood topics in Pacific archaeology. One major reason for this is the near absence of usable data from Indonesia, the likely transit zone of Austronesians moving from the Philippines or West Papua in Indonesia towards the western Pacific. That said, all candidates for local pre-Lapita pottery in northern Melanesia have been rejected, so the sudden appearance of ceramics in the Bismarck Archipelago apparently signals a new or changed connection with the west. Pottery typology has long recognized correspondences between the red-slipped tradition of Island Southeast Asia and Lapita (Bellwood and Koon 1989).

So, too, with the dentate-stamping that constitutes the most visible "trademark" of Lapita. Recent results in the northern Philippines and Western Micronesia show the existence of dentate-stamped decorations on pots in Island Southeast Asia nearly 500 years before the earliest-known Lapita sites in the Bismarck Archipelago and a few centuries later in the Marianas (Clark *et al.* 2010; Winter *et al.* 2012; Carson 2013). The intricacy of Lapita dentate decoration has not been found outside Island Melanesia to date, but this does not rule out the earlier existence of dentate-stamped motif developments in the wider Halmahera region of Indonesia that archaeology has yet to uncover. Thus while it is conceivable that Lapita's immediate origins lie in the early material in the Philippines rather than in Island Melanesia, in the form for instance of the recently proposed direct link between the Mariana Islands and the Bismarck Archipelago (Hung *et al.* 2011, 2012), it is premature to propose such alternative settlement scenarios until the Halmahera region is better known.

The foregoing archaeological data, supported by well-founded linguistic and genetic evidence, greatly strengthen the likelihood that a major Southeast Asian input into northern Island Melanesia underlies the appearance of the Lapita phenomenon. Note, though, that the push might also have been partly fueled by pull factors associated with the massive eruption of Witori volcano on New Britain around 3350 BP (see also Lilley this volume). Known as "W-K2," the impact of the eruption on nearby areas was cataclysmic (Torrence and Doelman 2007). Communities further afield would also have been disrupted by the death of entire communities, the destruction of planting grounds, possible coastal flooding by tsunamis and the interruption of exchange networks which pre-existed Lapita in the region, centered on stone mortars and pestles as well as flaked obsidian stemmed tools (Torrence and Swadling 2008).

Did Lapita groups fill a void, occupying an exchange 'niche' by introducing new trading items to a disrupted network linking communities across the Bismarcks and further afield? What appears unquestionable is that the very earliest Lapita potters, across the entire span of the Bismarcks, produced closely similar pot forms with near-identical very fine dentate-stamped motifs (Summerhayes 2000; Kirch *et al.* 2015; Sand 2015). This technical and stylistic unity is not replicated later in any Pacific sequence. It hints at the existence of only a small number of Lapita groups at the very early stage of the chronology, spread through an archipelago some 650 km across. These people were probably in regular contact through a simple web of connection between coastal settler groups (Kirch 1997).

A 'lifeline' connecting back to the west is to be expected, through which other people could reach northern Melanesia. This is illustrated by the presence on the northeast coast of Borneo by about 3000 BP of obsidian flakes from Talasea in New Britain (Bellwood and Koon 1989; Chia 2003). These data imply a link between the appearance of Lapita in northern Island Melanesia by 3350–3000 BP (Denham *et al.* 2012) and a wider "community of culture" in Island Southeast Asia, that fueled an expanding network of potting communities which used Talasea obsidian. Although probably limited in actual numbers at first, the long-term historical impact of these first Lapita communities in the Bismarck Archipelago was extraordinary, as described next.

Western Lapita, a new "community of culture" in the Bismarck Archipelago

A diversification of pot forms and dentate-stamped as well as incised motifs is identifiable between an initial "Far Western" Lapita tradition restricted to a few sites in the Bismarck Archipelago and a later and more widespread "Western" Lapita tradition. Very fine dentate-stamped designs gave way to mostly medium-sized imprints used to produce a large array of geometric and anthropomorphic motifs. The diversity of detail between the motifs from different sites signals a significant expansion of the Lapita network, which probably cannot be solely explained by a hypothesized continuous influx of small family groups from Southeast Asia. The reasons for this progressive expansion remain a point of debate but the outcome must have been a progressive creolization of the communities taking part in the Lapita network, between families of pre-Austronesian ancestry and recently arrived Austronesian-speakers, in proportions that varied from one settlement to another owing to local dynamics of biology and chronology.

This scenario implies some sort of diversification of the postulated "Proto-Oceanic" Austronesian languages, which were thought to have been spoken by the original Lapita communities. This process must have played out over a couple of centuries at least, the main consequence being that it was still underway in the Bismarcks after the first settlement of Remote Oceania, the vast and previously uninhabited region beyond the main Solomons chain, which had started by 3200 BP.

The overall unity of Western Lapita, strengthening the idea of a widespread "community of culture" that would soon expand southwards along the coastal areas of New Guinea's tip as well as southeastwards along the Solomon chain, is identified by the production of ceramic and non-ceramic items that are typologically comparable from one site to the other. Some of the pots where exchanged between communities (Kirch 1988). Exchange networks probably also included a whole array of shell ornaments (Kirch 1990). The best studied exchange item is obsidian, a rare volcanic glass, the sources of which are mainly restricted to the Talasea-Mopir area in West New Britain and several sources in the Admiralty Islands some distance to the north. Although restricted geologically to only two principal geographical areas, obsidian is present in large quantities in every Western Lapita site in the Bismarck Archipelago, illustrating the interconnected nature of the cultural complex (Summerhayes 2003).

Dating uncertainties have led to regular revisions of Lapita chronology in the Bismarck Archipelago (Specht 2007; Denham *et al.* 2012). Most syntheses highlight a "pause" in northern Melanesia before the spread southwards to New Guinea's southeast tip on one side and Remote Oceania on the other. It can be asked if this "pause" is not mainly the result of sampling bias, as whole regions remain archaeologically unknown. Recent recalibrations of dates for Far Western and early Western Lapita sites (which confusingly are more chronologically than geographically divided, despite the terminology) have shown the possibility of a change in just a few generations (Denham *et al.* 2012), a very short period in archaeological terms, with only the general accuracy that even AMS C14 dating allows. More accurate short-error methods might soon show that no long period of development was necessary for the rise of Western Lapita in the Bismarcks. If so, the early phase of the Lapita spread out of northern Melanesia might have had more to do with the continuation of a dynamic expansion process started in Island Southeast Asia than with local developments. This does not mean there were no further pulses of expansion in different directions during succeeding centuries.

Entering unknown seas

When, how, and at what speed the first Western Lapita communities of the Bismarck Archipelago began sailing southeast along the Solomon Islands chain remains archaeologically poorly understood. A classic Western Lapita site has been documented on Buka Island, at the northern end of the Solomons, but nothing else is then known before the southeastern end of the archipelago. The amount of research remains to be greatly expanded in all the large Islands in-between, before any firm conclusion can be reached. At present the Solomons situation echoes the case of nearby Vanuatu 20 years ago, which we now know has many Lapita sites (see Bedford 2015: 30–31). Nonetheless, archaeologists Peter Sheppard and Richard Walter have proposed, on a number of grounds, that there is a real absence of Lapita all through the central Solomons as a result of a bypassing strategy, in order to avoid contact with the non-Austronesian communities that had occupied the area for millennia. Whatever the answer turns out to be, between down-the-line settlement or long-distance leap-frogging, once Lapita migrants reached the southern limits of the Solomons they entered unexplored seas, with no land in sight.

That one canoe successfully crossed the 330 km between the southern point of Santa Ana and the first islands of the Reef/Santa Cruz archipelago, probably around 3200 BP, is in itself indicative that at least some Lapita groups were in a dynamic process of discovery of new lands, although they had just passed by large islands only sparsely settled by small forager-farmer groups. While probably greater than any distance that their forefathers had sailed in the preceding generations, a crossing of over 300 km was probably not a great achievement, as other Austronesian groups in the Northern Pacific had crossed the 2,300 km strip from the Philippines to the Marianas a couples of centuries before, most probably with the same general sailing technology. The discovery dynamics continued well beyond the Reef/Santa Cruz in the succeeding generations, towards the south—reaching Vanuatu and ultimately New Caledonia in about one century—and then towards the east, with the successful discovery of Fiji by about 3000–2950 BP (Nunn and Petchey 2013).

The Western Lapita component identified archaeologically in the Reef/Santa Cruz Islands, on sites SZ-8 and RF-2, shows striking similarities with sites in the Bismarcks dated to the same time period. A number of studies have identified remarkable links in motif composition between 'motherland' sites in the north and the new settlements 1,500 km to the southeast. Yet the best indication of continued relationships between some Lapita communities in northern Melanesia and those entering Remote Oceania is a regular influx of obsidian from the Talasea source for a number of generations after first settlement.

The Lapita communities settled in the Reef/Santa Cruz certainly served as a major node for groups wishing to pursue the adventure into Remote Oceania, and to preserve this role, people in these islands had to remain connected to the motherland settlements. The question remains whether the ties were maintained only with the descendants of the original communities or if progressively more creolized groups were included as the Lapita network continued to expand in the Bismarcks, incorporating new groups with different cultural backgrounds.

Navigating in unchartered seas, the Lapita explorers probably followed the main winds through Melanesia. The earliest communities of northern and central Vanuatu, as far as Efate, exhibit the same characteristics as the early Reef/Santa Cruz settlers, with the production of classic Western Lapita vessels and, significantly, the introduction of a substantial amount of obsidian, mainly from Talasea. On typological grounds, the earliest site known to date, located on Aore Island in northern Vanuatu and dated to 3100 BP, may actually be the earliest site in the area, as it contained a set of transitional Far Western/Western Lapita pots (Galipaud 2010; Galipaud and Swete Kelly 2007).

Over the succeeding century, Lapita communities were successfully established in all the prime locations for a first settlement, on large islands as well as on small but environmentally diverse outer islands (Bedford and Galipaud 2010). The discovery of the first-known Lapita cemetery, at Teouma in central Vanuatu, demonstrated the existence of a complex array of burial practices amongst Lapita communities (Bedford *et al.* 2010), but also yielded direct evidence for the movement of people between islands. Isotopic analysis of the 68 individuals buried in the cemetery between 3000 and 2900 BP (Petchey *et al.* 2014) shows that four were not born and raised on Efate, but in different environmental circumstances. This was the case of an old male adult, for example, whose head was retrieved and taken somewhere else after primary burial, but who had the skulls of three individuals placed on his chest, probably as sign of his important rank (Bedford *et al.* 2010: 158).

Southern Melanesia

The curvature of the Melanesian arc means that the route to the last archipelago from southern Vanuatu is in a southwesterly direction, towards New Caledonia lying at the limits of the tropics. Lapita explorers discovered Grande Terre (the Main Island) some decades before 3000 BP, most probably though the stepping-stones formed by the uplifted coral islands of the nearby Loyalties. The unrivalled diversity of coastal landscapes, the colder southerly location, as well as the unique geological characteristics of the archipelago, where Grande Terre and immediately adjacent islands are remnants of Gondwana, appear to have fostered a set of specific local dynamics.

Some settlements were large, reaching over 20,000 m^2 in total extent, and were occupied for a number of generations. Others, of smaller size and often located in less favorable locations, were more transitory. Although the earliest settlements yielded pots that can comfortably be classified in the Western Lapita series, there were a number of changes in pot forms and motifs over the first few generations of settlement. The most striking change is a massive increase in the size of some pots, especially carinated jars. While in Western Lapita this form is usually around 30–45 cm maximum diameter, pots up to 80–85 cm wide are present on Grande Terre by about 950 BCE. A whole set of stylized anthropomorphic face motifs developed at the same time, in proportions unseen in any other Lapita region, while some motifs common elsewhere are nearly absent (Sand 2010).

The complexity of exchange patterns in the region is readily apparent though two contrasting examples. The first is the massive reduction in Talasea obsidian imported from West New Britain, with the decline cutting in south of central Vanuatu. On Grande Terre and the adjacent Isle des Pins, only a few small obsidian flakes, all sources to Kutao/Bao in Talasea, have been recovered despite extensive excavation. The existence of good chert for flaking on Grande Terre is not sufficient to account for this massive difference. It seems likely that the near-total interruption of obsidian exchange can be partly explained by the break-up of a node in the network associated with the movement of obsidian across long distances, allowing only the episodic arrival of a few flakes.

Yet the postulated interruption of the obsidian flow in southern Vanuatu–New Caledonia does not signal an end of long-distance exchange between central and southern Melanesia. This is illustrated on a south–north axis through the sourcing of about 10 per cent of the decorated Lapita pots identified in the Teouma cemetery, to production centres on the Grande Terre of New Caledonia (Dickinson *et al.* 2013), with some pots finding their way even further north to Malo in northern Vanuatu (Dickinson 1971, 2006). This represents a total distance by sea of approximately 500 km, the voyage of the pots probably including stops along the way.

These regular links between distant communities in two archipelagos complement connections between Lapita groups in New Caledonia itself. The existence of a series of major network nodes linking the Lapita settlements of Grande Terre among themselves and with the Loyalty Islands has been shown by Chiu's long-term program on temper analysis, which has even identified shifts in exchange nodes over time (Chiu *et al.* 2016). The late first-settlement date obtained for the Lapita site of St. Maurice-Vatcha on Isle des Pins, just south of Grande Terre, around 950 BCE, by groups producing a version of classic Western Lapita that the communities settled for more than a century elsewhere in the archipelago had already made redundant, illustrates the need to take into consideration a process of repeated arrivals of new groups from northern Melanesia over a number of generations after the first discovery of each archipelago. On a number of occasions, these later arrivals introduced old/new typological/decorative/social rules into the already established settlements and may also have created new networks aside already existing ones.

The Eastern push

While central and southern Melanesia slowly diverged from the classic Western Lapita tradition, a nearly instantaneous separation was witnessed further east, in the Fiji–West Polynesian region. The western part of Fiji, around the large Island of Viti Levu, was probably discovered by about 1000 BCE, when Lapita sailors introduced classic Western Lapita pottery with complex dentate-stamped motifs organized around a central band surrounded by friezes. As in New Caledonia, the families who first settled Fiji, although certainly at least transiting though the Reef/Santa Cruz Islands, did not expand the obsidian network from Talasea. As a result, only a few small flakes have been found in the earliest Fijian sites (Best 1987; Ross-Sheppard *et al.* 2013).

Burley's detailed work at Nukuleka in Tongatapu has identified the very precisely dated first settlement in Western Polynesia at 2838±8 BCE (Burley *et al.* 2012). Some Nukuleka sherds come from the Reef/Santa Cruz islands, but others are most probably from Fiji, demonstrating that by that time, at least some communities where still producing highly decorated vessels in or around Viti Levu. Yet almost instantly, these sherds are associated with a much more open set of dentate-stamped motifs, characteristic of an emergent "Eastern Lapita." Pots like this spread throughout Western Polynesia and are in all Fijian sites dated after 900 BCE.

Statistical comparison appears to distinguish a more developed motif repertoire in Western Fiji compared with Eastern Fiji and Western Polynesia (Clark and Murray 2006), signaling the emergence of sub-regions. Settlers in the Lau Islands in Eastern Fiji were tied more to Tonga, Futuna, Uvea, and Samoa than to Viti Levu, bridging the divide that later separated Melanesia from Polynesia.

Analysis

Theoretical models defining archaeological globalization have been rooted in diverging analyses, with modernist views favoring meta-narratives with a top-down hierarchical approach, and more post-modernist thinking which highlights 'social and micro-cultural diversities' (see Hodos 2010: 82). The Lapita case stands at the crossroads between these two approaches, with the specificity of being an expanding cultural front associated with a rapid initial diaspora colonizing an extensive maritime region. As such, Lapita incorporates three aspects of globalization that need analysis: (1) The expansion of a diaspora and the influences of local communities confronted with new settlers; (2) The nature of ties between mother- and daughter-communities during exploration of previously unoccupied areas; and (3) The processes of diversification linked to founder effect.

Hybridization: incoming Austronesians and "indigenous" groups in the Bismarck Archipelago

Archaeological data on early Lapita development in northern Island Melanesia, scant as they may appear, highlight a link with Island Southeast Asia. Ceramic technology, linguistics, and some genetic data align in identifying a movement of people from the west, bringing new ideas, new symbols, and new technology. A number of authors stress the need to understand globalization as merely a process of hybridization, in which "foreign" ideas introduced from abroad are manipulated in specific ways in order to be adapted to local specificities (e.g. Nederveen Pieterse 1995). The concept of hybridization can be applied to the period between the first archaeological appearance of finely dentate-stamped and typologically complex Lapita pots in the Bismarck Archipelago (Far Western/Early Lapita), characterizing the incoming tradition of a 'foreign' cultural group, and the emergence of the classic Western Lapita tradition in the same region a few generations later (Denham *et al.* 2012). It can be postulated that local agency was central in the typological evolution of the Lapita tradition, Lapita communities probably integrating with existing long-distance exchange networks controlled by "indigenous" communities. To the effects of "Intrusion" and of "Integration," Green (1991, 2003) added a third "I," for "Innovation." This aspect of globalization is little discussed in the archaeological literature (see Green 2000), although it is essential to take into account in any process of hybridization involving small communities scattered across a vast expanse of sea.

The Bismarck Archipelago around 3300 BP was clearly a crossroad of ideas and technological innovations, binding related communities through complex exchange networks circulating pots, shell ornaments, stone tools, and raw material. That these communities exchanged, though sailing journeys necessitating sometimes days at sea, pots with fabrics and overall designs similar to those each produced locally, highlights close ideological as well as cultural ties. These ties must have rapidly neglected phenotypic variation and earlier diverging origins of the groups participating in the growing Lapita interaction sphere, cultural/ideological sharing being the main driver of relatedness.

In this regard, the question of language uniformity remains open to further analysis, as any process of hybridization would have created a number of linked but specific creole languages over a region the size of the Bismarck Archipelago. In contrast to linguistic studies stressing the existence of a single proto-Oceanic language group, recent archaeological analysis tends to partly disconnect the Western Lapita tradition from a single homogenous language (see Donohoe and Denham 2012). If the scenario proposed in this chapter is correct, it will be vital to take into account the major differences between the linguistic situation of Austronesian speakers at the time this language family entered Melanesia, compared to what was at play a few generations later, during the development of Western Lapita. As has been described elsewhere, "the way in which globalization . . . combines space and time, geography and history, is particularly powerful, although arguably this power has not been harnessed sufficiently" (Knappett this volume).

Spatial connectivity: mother- and daughter-communities

Globalization theories have stressed the importance of networks in the definition of inter-regional connectivities (e.g. Malkin 2011). Lapita, as a first settler community in Remote Oceania, renders the case difficult to compare to most other archaeological studies on the topic, as in this case network-building was vital to the success of people's dispersal across unknown seas. Support in case of need or natural disaster, mate-exchange, regular ritual encounters, all participated in the preservation of cultural/social ties and allowed the sharing of information between related but isolated communities (Green 2003). Here the question of "indigenous" versus "outsiders" in the building of networks does not apply. It is the connection between a number of "mother-communities" that served as central nodes, and a series of "daughter-communities" that grouped the expanding branches, that in the case of Lapita appears to best define the nature of the relationships.

Green (2003) has used the image of a "string of pearls" proposed by Moore (2001) to illustrate the complex set of nodes, at different levels, that connected settler communities in Remote Oceania. Archaeological data provide strong material evidence for the ties that were maintained during the first generations of discovery/settlement, through the presence of foreign goods in the sites. Obsidian flakes are the most recognizable items pointing to foreign origins, with a clearly marked difference between the sites as far out into the Pacific as central Vanuatu—which have lots of remains—and the regions beyond, where only a few flakes are present.

Exchanges of decorated pots come as an additional example of the regular physical relationships between distant communities. But privileged binding between specific family groups is also apparent though other studies (see Sand 2010: 224). Statistical analyses have shown the existence of two major sets of decorative patterns in Lapita, one using circles and the other not (Noury 2005). Working on a larger sample, Chiu has been able to identify the existence of a series of related motif-associations between sites, which she has interpreted though a "house society" model as specific family/clan patterns seen as "inalienable possessions" (Chiu 2005, 2007, 2015).

Statistical data show the presence of a restricted range of prevalent motifs, in combinations that differ from one site to the other. This is also true at a larger archipelago level. Lapita communities in New Caledonia, for example, appear to have deliberately made little use of the classic "house" motif, while at the same time expanding exponentially the diversity of stylized "face" motifs (Sand 2010: 152–55). This deliberate choice in this case defines a "Southern Lapita," highlighting a process of regionalization after first settlement, when networks developed between settlements progressively created across the archipelago, in a series of nodes which over time lost their mother–daughter bonds.

From homogeneity to heterogeneity: the Lapita breakdown

Robertson (1995) has stressed how much any study of global phenomena, be it in the modern era or in the past, needs to take into account the complexity of human processes. While in a number of cases "the growing intensity of contact and communication at the global level can develop into a clash of cultures, which leads to heightened attempts to define the boundaries between different groups more strongly" (Hodos 2010: 82), this approach cannot be applied to Lapita in Remote Oceania. Notwithstanding this, archaeology clearly shows a rapid process leading from overall homogeneity in cultural practices and material culture, to regional heterogeneity.

In the human history of the Pacific, the Lapita Cultural Complex represents the apex of regional homogeneity and a form of globalization when connected to Island Southeast Asia. Although obviously accepted as a complex and multi-scale phenomenon, the striking similarities that can easily be observed between sites in Island Melanesia in particular—when broadly comparing pottery forms, and dentate-stamped motifs, but also shell items, the stone flaking industry or adze typologies—tell us something about "being a community." Even if the monolithic linguistic image of a related set of proto-Oceanic languages is questioned today, Lapita communities spread across the Southwestern Pacific 3,000 years ago certainly felt part of "a people" in the cultural sense.

Yet in highlighting the basic cultural and typological unity of Lapita as it was spreading though Near and Remote Oceania, we must not overshadow the overall very short duration of the phenomenon. While distance is an evident reason to explain the break-up of cultural trajectories from a common cultural mold, it is far from being the only cause. Founder effect appears to be at the core of the near-immediate changes that occurred in the Eastern Lapita Province in less than a century following first discovery of Western Fiji. Something among the founding communities must have led to the shift from the complex decorative system of Western Lapita to a more open and less-painstaking type of decoration. In between, Fijian Lapita potters invented the decorative roulette, a less time-consuming way of imitating the multilayered imprints that their forefathers had to apply to get large friezes. In southern Melanesia, it was probably adaptation to a unique type of continental environment and the very safe navigation enabled by the 700 km-long protective lagoon of Grande Terre that fostered dynamic cultural variation. At the same time, Lapita communities in the Reef/Santa Cruz Islands were still maintaining long-distance relations with their mother-communities in the Bismarck Archipelago.

In these differentiated and progressively regionally specific cultural dynamics leading to the break-up of Lapita's homogeneity, the changes that may have been introduced by later arrivals have until now been rarely taken into consideration, the question exacerbating the racial divide between Melanesians and Polynesians. But regarding the identification of possible linguistic diversity during Lapita and immediate post-Lapita times, the hypothesis of the development of a series of creole languages through the inclusion of non-Austronesian communities in the Lapita network, and the demonstration of post-first-discovery arrival of new families at least as far as southern New Caledonia, hint to a complex and multi-generational diaspora.

Unequivocally, the spread of different types of genes must be taken into consideration if the hypothesis of a progressive inclusion of non-Austronesian groups in the Bismarck Archipelago is confirmed. Given that the numbers of local non-Austronesian people versus incoming Southeast Asian Austronesian-derived but mixed-descent groups would have been strongly weighted in favor of the "indigenous" groups, it is probable that a progressive shift towards more "Melanesian"-looking phenotypes occurred during Lapita times in northern Melanesia as well as progressively southward, owing to the arrival of more creole families in the centuries following the first human spread into Remote Oceania.

These later movements of population, on a slow path, did not affect Fiji–Western Polynesia on the same scale as it did in the Melanesian crescent. This helps to explain how late-Lapita skeletons on Watom are identified as bearing "Melanesian" traits (Shaw *et al.* 2010), as are early post-Lapita Mangaasi-period human remains in central Vanuatu (Valentin *et al.* 2005) and post-Lapita Koné period skeletons of the Foué/Lapita site in New Caledonia (Pietrusewsky *et al.* 1998; Valentin and Sand 2000), while the late-Lapita skeleton Y2-25-1 from Waya Island in the Yasawa group (Pietrusewsky *et al.* 1997) and those of Talasiu in Tongatapu (Valentin and Clark 2013) have a more Southeast Asian/Polynesian set of characteristics. For this reason, detailed results from the Teouma Lapita cemetery and the newly excavated late-Lapita Tongan skeletons of Talasiu (Valentin *et al.* 2016) are eagerly awaited.

If the dynamic and multi-staged process that has been proposed in this chapter is confirmed by future studies, it will allow us to understand the diversification that was at play, at least in the archaeological material, at the end of Lapita and in the following centuries in Island Melanesia. It will also make sense of the far more homogeneous regional evolutions observable in the Fiji–West Polynesian region, with the concomitant development for example of unique collared pots and the appearance of a distinctive "long unit" shell ornament across the entire region. At that point in time, the former overall unity of the Lapita Cultural Complex had long vanished and the distinctiveness of the ancestral Melanesian and Polynesian cultural trajectories was emerging. But that is another story (Burley 2013; Addison and Matisoo-Smith 2010)!

Conclusion

This chapter sought to analyze the overarching unity of the Lapita Cultural Complex that spread across the Southwest Pacific about 3,000 years ago, as well as its rapid break-up into a series of more regional cultural entities. The definition of Lapita as a global phenomenon, even though of only short duration, across an area of over 6,000 km if ties to Island Southeast Asia are taken into consideration, is unquestionable. The long-term cultural legacy of Lapita in Oceanic societies is also becoming better documented, at the same time as post-Lapita changes and cultural influences across the region become better identified. Future studies about Lapita will have to work though entire collections of ceramic and non-ceramic material to come up with more robust data, allowing in turn the comparison of sites and regional provinces on firmer scientific grounds. Physical anthropology and especially DNA studies have to come of age by incorporating the complex processes that characterized the 3,000 years of pre-European history of the region. In this regard, there is an urgent need for a better disentanglement of the notion of "Melanesia," which encompasses whole sets of different populations that cannot be grouped in any way under one single denomination. Today, Lapita has become an historical icon linking the different cultures of the Pacific around an ancestral figure of a settler hero: the gift of Oceania's past to our globalized world.

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4.7
East Polynesian connectivity

Marshall Weisler and Richard Walter

Introduction

Prehistoric East Polynesia was never part of the truly global community, but many of the processes that underpin and drive globalization were incorporated into the region's social fabric from the beginning. These processes are concerned with connectedness, as globalization has been defined simply as a form of connectivity (Robertson 2014; see also Feinman this volume, Jennings this volume, Knappett this volume). Connectedness is about the establishment and maintenance of social and economic ties between communities and, in most parts of the world, it is described as *emerging* out of social, demographic and technological processes. East Polynesia is fundamentally different, as connectivity was introduced in finished form by the first settlers. This distinction is important because the East Polynesian case highlights the pivotal role of connectivity as a colonization strategy, as a condition of geography and as a process contributing to long-term sustainability. Furthermore, determining the spatial, temporal and diverse nature of connectedness between island societies at the scale of island, archipelago and broader region is essential for understanding prehistoric East Polynesian culture change. Indeed, the hallmark of East Polynesian societies was the expansive and diverse nature of community inter-connections, a trait inherited from Austronesian forebears.

The most significant distinction of Oceania is between the large, geologically diverse and closely spaced islands in the southwest Pacific and those scattered across the rest of the region which are generally smaller, consisting mostly of oceanic basalts, and rarely inter-visible (Figure 4.7.1). This distinction between 'Near' and 'Remote' Oceania (Green 1991) has important implications for island colonization strategies (Irwin 1992) and the subsequent development of insular communities. Oceanic islands were recognized early on as ideal 'laboratories' for systematically predicting non-human species numbers and relationships based on island size (McArthur and Wilson 1967), and archaeologists were quick to acknowledge that islands – as clearly bounded territories – provided a unique canvas upon which to study the development of prehistoric economies, social systems and political structures over time, and between contrasting ecological settings. The first colonists of Near Oceania arrived about 50,000 years ago and the seafaring 'Lapita people', of Austronesian ancestry represented a secondary migratory wave around 3500 BP. They rapidly spread across Near Oceania then into Remote Oceania as far

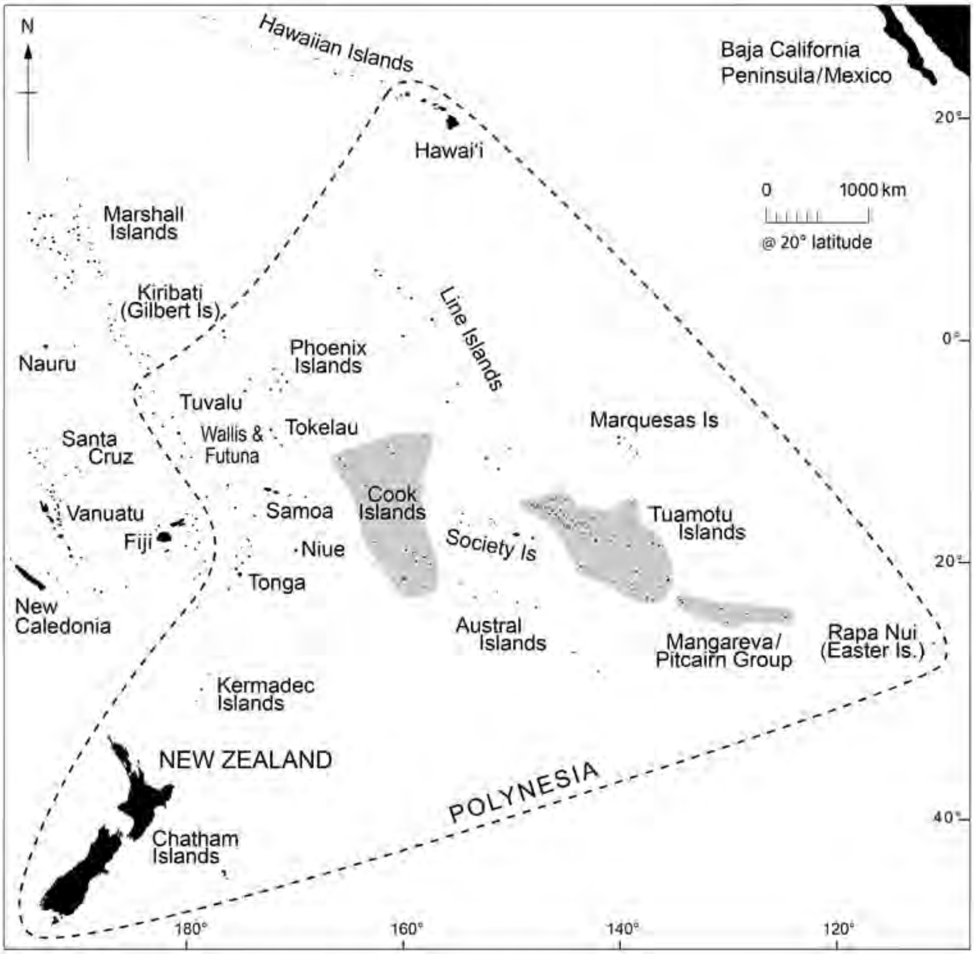

Figure 4.7.1 The Pacific Islands showing the Polynesian triangle and the location of case study areas: Cook Islands, Tuamotus, Mangareva-Pitcairn Group and New Zealand

east as Samoa. The Lapita colonists were the immediate ancestors of the Polynesians who form a phylogenetic unit recognized by related languages, biology and cultural institutions (Kirch and Green 1987). Within Polynesia it is possible to divide West from East archipelagos based on a range of cultural traits (Burrows 1938).

In this chapter we document the changing scale, configuration and temporal dimensions of connectivity in East Polynesia. We show that East Polynesian connectivity did not emerge out of evolving social processes, but was a deliberate enabling strategy essential for colonising the remote Pacific (Irwin 1992). We demonstrate how this process played out on a canvas of different archipelagos with contrasting resources, both small and large islands, and with varying levels of ecological diversity and remoteness. In particular, we highlight the significance of the geographic position of archipelagos, such as the isolation of New Zealand and the Pitcairn Group in contrast to the centrally located Tuamotus.

There are two major expressions of connectivity in East Polynesia: (1) as a colonization strategy, where vital links were developed and maintained between parent and multiple-daughter communities to support the establishment of economically and socially viable groups and (2) as marked by post-colonization voyaging not necessarily to maintain basic functional viability, but to support socially mediated imperatives such as the acquisition of high-status goods, the fostering and maintenance of strategic alliances and the establishing of individual and group prowess or *mana*.

The archaeological signatures of connectivity are easily identified by the spatial and temporal distributions of pottery and obsidian – two commodities that are found throughout much of the world. However, in East Polynesia obsidian is only found in the two distant corners (New Zealand and Easter Island) and all the archaeological pottery currently known wouldn't even fill a small coffee cup. Consequently, tracking connectivity in East Polynesia requires the geochemical 'fingerprinting' of fine-grained basalt (Weisler 1997a), which was fashioned into wood-working adzes and other cutting tools. Since the refinement of protocols and geochemical techniques during the past 20 years, we can identify exotic basalt artefacts in distant habitation sites. Indeed, one Tuamotuan adze was identified as originating from the Hawaiian Islands, a distance of ~4000 km – making it the longest known, continuous maritime trip in world prehistory (Collerson and Weisler 2007). In addition to basalt, imported Black-lipped pearlshell (*Pinctada margaritifera*) can be visually distinguished from local shellfish (such as *Turbo* gastropods and *Isognomon* bivalves) for tool and ornament manufacture.

The following four case studies highlight the variability in connectivity or interaction systems even within the relatively homogenous culture area of East Polynesia (Figure 4.7.1). The spatial and temporal distributions of exotic materials we identify were the result of different circumstances: the geographic position of archipelagos, differences in colonization strategies, and the need for sustaining distant daughter communities.

The Cook Islands: bridging West to East Polynesia

Venturing from West Polynesia about a millennium ago, the Cook Islands were the first archipelago encountered and whose 15 islands stretching ~1000 km from north to south provided a bridge or gateway into previously unseen islands scattered across the far reaches and remote corners of East Polynesia. It is a diverse group of islands, with eight low-lying coral atolls (six of which form a dispersed group to the north), one 'almost-atoll' of Aitutaki, which has a central volcanic core surrounded by a barrier reef, the five *makatea* or raised reef islands of Miti'aro, Atiu, Ma'uke, Takutea and Mangaia – all with central ancient highly eroded volcanoes with a perimeter of deeply dissected and rough coral limestone fronting high cliffs – and the volcanic island of Rarotonga, the highest (652 m) and largest (64 km^2) of the group. Low coral atolls, consisting of unconsolidated coralline sands atop reef platforms, are amongst the most precarious islands for long-term habitation since gardening soils must be developed by mulching over many human generations and potable water is limited to subterranean lenses. However, there is typically a huge expanse of lagoon and oceanside reefs that provide abundant marine resources. *Makatea* islands, also challenging landforms for sustainable human habitation, have limited agricultural lands, which were highly sought after in late prehistory. Because of the uplift history, coastal margins are narrow and, consequently, reefs are poorly developed. Rarotonga has the most extensive agricultural lands and best water resources, with a system of barrier reefs that surround the island.

Fine-grained basalt for manufacturing adzes typically has been used for documenting prehistoric interaction throughout East Polynesia, yet appropriate sources have a very limited distribution in the Cook Islands. Geological sampling of volcanic flows on Rarotonga, Aitutaki and Mangaia have identified adze-quality material from most of the valleys, and a single source has been documented on Atiu and on Ma‘uke (Sheppard *et al.* 1997). It is not yet clear, however, which of the potential sources were used prehistorically. Flake concentrations at the archaic site of Anai‘o suggest the local basalt source was used in prehistory (Walter 1998: 48) and an undefined source is known from Mangaia near Mata‘are (Weisler *et al.* 1994). There is also evidence of the flaking of boulders to make adzes at Moturakau, a barrier island on Aitutaki's reef (Allen and Johnson 1997: 119). Recent geochemical studies point to several additional sources throughout the Cooks at Rarotonga, Mangaia and Atiu (Weisler *et al.* 2016). The atolls have no sources of volcanic rocks but they do have stocks of Black-lipped pearlshell (as perhaps did Aitutaki) that was likely transferred to the southern Cooks. There is a source of chert on Mangaia. These sources, then, contain the main raw materials whose geochemical signatures (or visual identification in the case of pearlshell) are used to track ancient patterns of connectivity.

The dates for Oceanic island colonization routinely elicit debate and discussion and there is rarely a consensus. This is also true of the Cook Islands, where some have argued for colonization before 2000 BP based on purported evidence of human disturbance identified in lake cores as dispersed charcoal particles (Kirch and Ellison 1994). This particular claim was questioned by Anderson (1994), but there is general agreement for colonization sometime between 1000–1300 CE (Allen and Wallace 2007; Kirch *et al.* 1995; Walter 1998).

In his monumental treatise on ancient Polynesian societies, Goldman remarked that the Cook Islands ‘reveal almost the full range of Polynesian social systems’ (1970: 76). The generally resource-poor northern atolls were classified as ‘traditional’ societies, where seniority is central and establishes rank and allocates authority and power (Buck 1932: 43; Goldman 1970: 20). Mangaia and Rarotonga, on the other hand, were classed as ‘open’ societies, where coercion and military might played a fundamental role in structuring society and maintaining rule (Buck 1934; Goldman 1970).

Despite the variability in island environments, the southern Cook Islands trace a broadly similar pattern of change in material culture, settlement patterns and economy. The earliest phase of settlement is represented on Rarotonga, Aitutaki, Ma‘uke, Mangaia and probably Atiu, suggested by dense settlements located adjacent to major reef passages (Walter 1996a). These sites contain evidence for a full range of domestic activities and are interpreted as small, sedentary villages. The material culture of these sites falls within the broad umbrella of the East Polynesian Archaic (Bellwood 1970; Sinoto 1970) and includes rectangular and reverse-triangular tanged adzes, one-piece shell fish hooks, tattooing chisels and shell and bone ornaments. It is also characterized by the presence of non-local material sources – particularly pearlshell and basalts – as well as a handful of ceramic sherds. From approximately the beginning of the sixteenth century there are marked changes in settlement patterns. The nucleated coastal sites are abandoned in favour of a more dispersed settlement pattern based around occupation of the planting lands of the river valleys and inland coastal plain (Bellwood 1971; Walter 1996a). *Marae* (temple) construction commenced around the same time, signalling the emergence of the Cook Island chiefdoms described at European contact with their twin axis of secular and sacred power (e.g. Goldman 1970; Reilly 2003, 2009; Walter and Reilly 2010).

The evidence for connectivity comes, first, from oral tradition, which throughout the Cook Islands records a period, immediately following colonization, of high levels of long-distance voyaging. This is the time of the great heroes, Tangi‘ia, Karika and others whose exploits traversed the islands of Central Eastern Polynesia (Walter and Moeka‘a 2000). This contrasts with later traditions, which record lower levels of interaction and normally only refer to nearby islands (Walter and Reilly 2010: 369). Hard evidence of connectivity comes from the archaeological record.

Table 4.7.1 Evidence for connectivity during the Cook Islands archaic period

Island	*Site*	*Date of occupation*	*Imported commodity*	*Origin*	*References*
Aitutaki	Ureia	1225–1430	FGB	Samoa, Society Islands, Mangaia	Allen and Johnson 1997; Allen and Wallace 2007
Ma'uke	Anai'o	1290–1446	FGB, PS, ceramics	Samoa, Tonga, Fiji, N & S Cooks	Walter 1996, 1998; Walter and Dickinson 1989
Mangaia	Tatangatatau	1200–1500	FGB, PS	Samoa, Australs, Marquesas, S Cooks	Kirch *et al.* 1995; Weisler *et al.* 1994; this article
Rarotonga	Ngati Tiare	Archaic	FGB	Samoa	Bellwood 1978; Walter and Sheppard 1996

Note: FGB= fine grained basalt adzes, debitage; PS= pearlshell (*Pinctada margaritifera*)

Although space limitations do not allow us to present the detailed archaeological evidence for connectivity in the Cook Islands, there are four key archaic period sites on Aitutaki (Allen and Johnson 1997; Allen and Steadman 1990; Allen and Wallace 2007), Ma'uke (Walter 1996a, b, 1998; Walter and Dickinson 1989), Mangaia (Kirch *et al.* 1995; Weisler 2016; Weisler and Kirch 1996) and Rarotonga (Bellwood 1978; Walter and Sheppard 1996) that, together, report the spatial and temporal distributions of 71 basalt artefacts, three ceramic sherds and numerous pieces of imported Black-lipped pearlshell from 161 m^2 of excavation (Table 4.7.1).

Other evidence for connectivity

Black-lipped pearlshell is abundant in the lagoons of the northern atolls (and perhaps Aitutaki), while there are no suitable habitats surrounding the *makatea* islands or the shallow coastal waters of Rarotonga. Large bivalves of pearlshell provided an 'open slate' for manufacturing a broad range of fish hooks, vegetable scrapers and peelers, and ornaments. In later prehistory, pearlshell was replaced with the inferior and locally available gastropod (*Turbo* sp.) for artefact raw material. Walter (1998: figure 11.1) summarized the frequency of imported pearlshell for five sites in the southern Cook Islands. All show a persistent decrease in pearlshell from the archaic to later prehistory, attesting to increasing isolation.

Connecting West and East Polynesia

There are marked changes in connectivity between the archaic and later prehistory in the Cook Islands, which mirrored trends throughout East Polynesia in general. During the archaic, contact was maintained – perhaps only for a few human generations – with distant archipelagos including Fiji, Samoa, Tonga, the Australs, the Society Islands and much farther afield to the Marquesas (Figure 4.7.2). It was during this time that the Cook Islands acted much like a bridge connecting the archipelagoes of West and East Polynesia. Over time, there was increasing isolation of communities previously tied to distant locales many hundreds to thousands of kilometres away. Later prehistory witnessed the end to extra-archipelago communication with communities only connecting within the southern islands (Walter 1998: figure 11.3), most frequently to landfalls that were inter-visible.

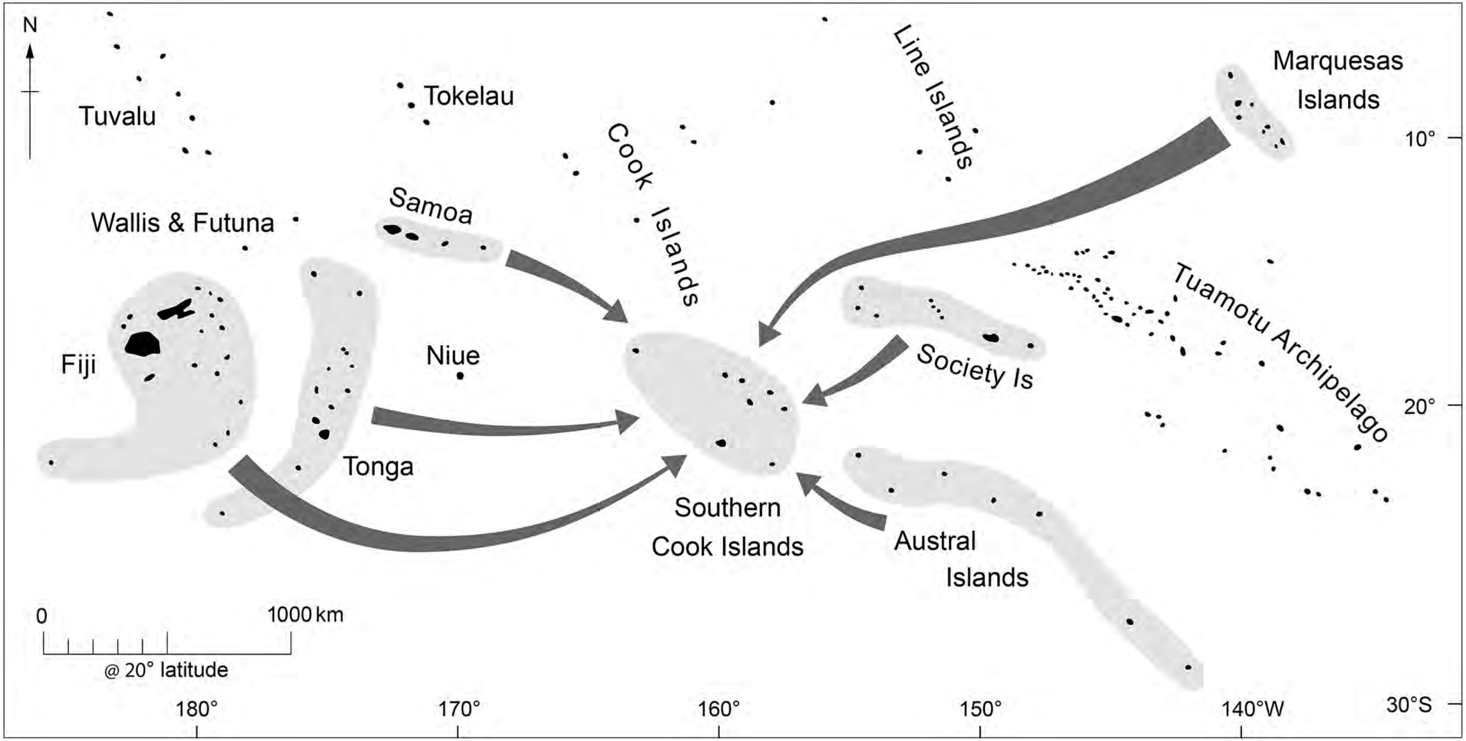

Figure 4.7.2 East Polynesia with archipelagos connected to the Cook Islands between *c.*1100–1500 CE

The Tuamotu Archipelago – crossroads of East Polynesia

Occupying a pivotal position in Central East Polynesia, the 76 islands of the low-lying Tuamotu Archipelago begin just east of the Society Islands then trend ~1500 kms southeast to Mangareva. Aside from one raised coral island without a lagoon, the Tuamotus consist entirely of low coral atolls, scarcely a few metres above sea level, with few terrestrial resources, no standing potable water and nutrient-poor soils, but their marine ecosystems are species diverse and plentiful. The Tuamotus could never support large human populations typical of nearby high volcanic islands, but one thing was unique in setting the Tuamotus apart from all other groups in East Polynesia: location. The long arc of islands, traversing a greater distance than any inhabited Polynesian archipelago, was a navigational screen whose islands provided hard-to-miss

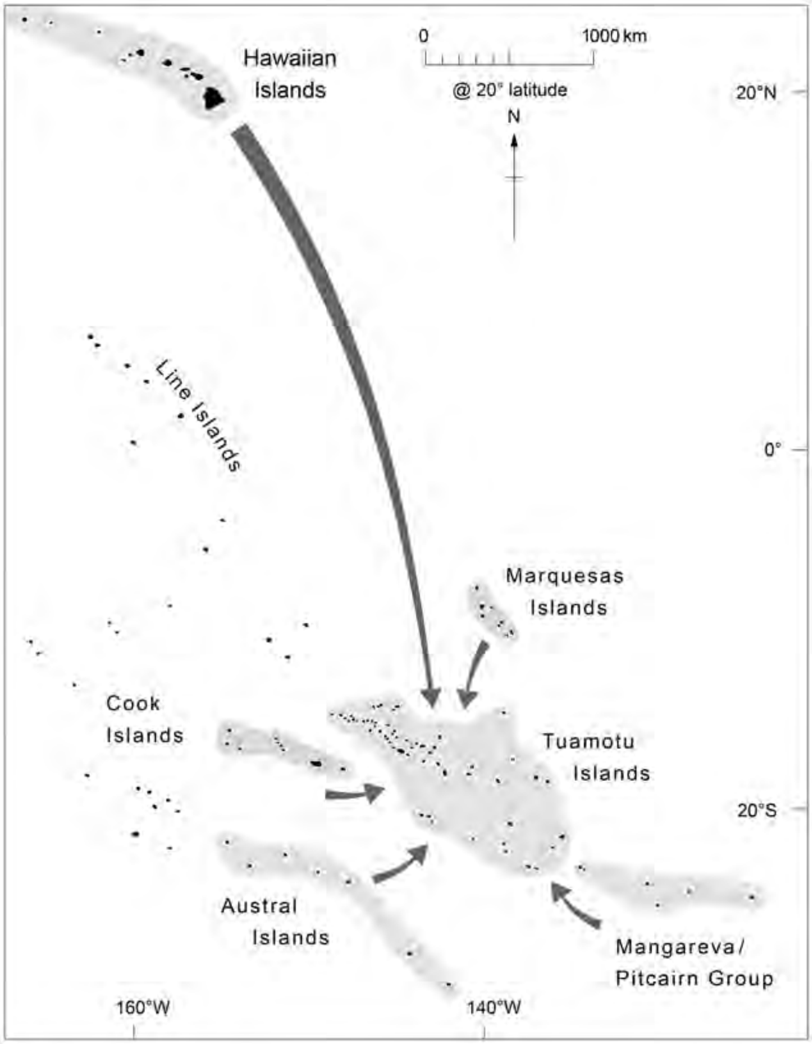

Figure 4.7.3 Tuamotus connectivity based on results in Collerson and Weisler (2007)

landmarks for canoes traversing to and from the surrounding island groups. In effect, the Tuamotus provided a crossroads that connected distant island groups. Indeed, archaeological evidence from geochemically 'fingerprinted', fine-grained basalt stone adzes found on numerous atolls of this group (Collerson and Weisler 2007; Figure 4.7.3) connected the Tuamotus to the surrounding archipelagos of the Marquesas, the Pitcairn Group, the Australs and the Society Islands. Transport of a Society Islands adze to Mangareva (Weisler and Green 2001), and Marquesan adzes to the Cook Islands (McAlister *et al.* 2013; Weisler *et al.* 2016) and the Society Islands (Weisler 1998) strongly point to the Tuamotus as an intermediary for down-the-line exchange (Renfrew 1977).

The Tuamotus are one of the least archaeologically studied archipelagos in Polynesia. Gardening systems and *marae* have been mapped (Emory 1975), but few controlled excavations have taken place (Chazine 1982, 1990). Consequently, human colonization of the group is likely to coincide with settlement of archipelagos to the west, such as the Society Islands, the Cook Islands or the Australs where first settlement is about 1000–1200 CE (Bollt 2008; Hermann 2013; Wilmshurst *et al.* 2011). This is further suggested by the timing of atoll emergence at about this time (Dickinson 2004).

In the widely scattered atolls of the Tuamotus, each with near-identical kinds and abundance of resources, it is unlikely that communities ever joined together for the purposes of barter or exchange as the possibilities for distinctly localized production were rare. Yet in the atoll archipelago of the Marshall Islands, the marked rainfall gradient provided a rainfall disparity from the dry north to the wet south which fostered specialized production of finished goods (fish hooks and mats) for agricultural produce (Weisler 1997b: 10). However, the difference in resources from the Tuamotuan atolls to high volcanic islands, such as Tahiti, fostered opportunities for transfer of long white dog hair from the atolls for various high-island resources from the Society Islands (Forster 1778: 366, quoted in Oliver 1974: 1148 n. 2). These occasions undoubtedly provided opportunities for the transfer of marriage partners, a vital addition to small communities with limited genetic diversity. In fact, future genetic studies of ancient human remains may document that the Tuamotus were more genetically diverse than the larger populations on the adjacent islands due to the diversity of traffic from the peripheral island groups. So while the Tuamotus were resource-poor, with low human populations and limited incentive for internal barter, exchange or trade, their centrally located position in East Polynesia was undoubtedly their greatest asset facilitating connections to distant external communities. Indeed, the Tuamotus were the most externally connected archipelago in East Polynesia and their geographic position was their greatest 'commodity'.

The Mangareva–Pitcairn group: sustainability only with connectivity

How do remote, isolated, and resource-poor communities survive without connecting to larger, resource-diverse communities that, in essence, provided a lifeline for survival? The two remote outposts of Henderson and Pitcairn islands, near the extreme southeast corner of Polynesia, provide the classic example of 'sustainability only with connectivity'; in this example with the volcanic island group of Mangareva, a three-day sail to the west.

This dispersed Pitcairn Group consists of four islands that are arguably the most remote and isolated in the world. They are situated 1,600 km west of Easter Island (Rapa Nui) and 400 km east of Mangareva (Figure 7.4.1). The 4.5 km^2 rugged and steep volcanic island of Pitcairn, the 36 km^2 raised limestone Henderson Island, and the two low coral atolls of Oeno and Ducie comprise the Pitcairn Group. Pitcairn, of course, was made famous by the *Bounty* mutineers that arrived in 1795 only to exceed the island's carrying capacity some 40 years later. Indeed, the community was forced to relocate to Norfolk Island as the isolated Pitcairn community was no longer sustainable. The Pitcairn coastline is rocky and there are no developed reefs, so island-based fishing yields limited returns and prime agricultural land is solely rain-fed and found on sloping ground in the centre of the island. Archaeological surveys and limited excavations (Weisler 1995) document colonization during the thirteenth century. An overnight sail north from Pitcairn, Henderson Island is the classic 'desert island', with only small pockets of gardening soil and no fresh water aside from ceiling drips in caves after heavy rains. Typical of raised limestone islands, the reefs have sparse coral cover with narrow beaches fronting cliffs that, at Henderson, are a uniform ~30 m high around the island. Wave-cut notches, raised during the 300,000 year uplift history, provide numerous rockshelters that are concentrated on the north and east coasts (Weisler 1997c: figure 9.3). These locales were the primary habitation sites on the island, aside from one extensive north coastal midden, with residential features such as pavements and postmoulds. Excavations in 15 sites totalling ~42 m^2 yielded more than 150,000 bones (of mostly fish, bird, turtle and rat), shell midden, and local and imported artefacts. Some 31 radiocarbon age determinations bracket occupation from about the eleventh to seventeenth centuries. Oeno Atoll has limited prehistoric archaeological evidence, while Ducie Atoll has no archaeological sites. The diminutive islands of the Pitcairn Group had limited resources, but Pitcairn Island had the largest fine-grained basalt source in southeast Polynesia (used primarily for fashioning into adzes), with geochemical sourcing evidence that it was transferred to Henderson Island and Mangareva. It also had the most significant source of volcanic glass, with nodules in excess of 10 cm in diameter, for manufacturing into small sharp cutting tools, which have been found on Henderson. It seems likely that Green Sea Turtles (*Chelonia mydas*), that still nest on Henderson's east beach today, and the long feathers from the Red-tailed Tropicbird (*Phaethon lepturus*) may have been exchanged to Mangareva after these resources were depleted there (Steadman and Justice 1998).

Goldman categorized Mangareva as 'a small version of the Stratified society' (Goldman 1970: 150). Whereas economic surplus is often a hallmark used, in part, to explain the drivers of political evolution, Goldman avers that Mangareva exhibited the opposite situation; that is, 'the stimulus of economic scarcity' (1970: 150). The uneven distribution of resources, most notably arable lands were, at least during late prehistory, the focus of traditional rivalries between competing groups. This situation was key to understanding the development and then collapse of inter-archipelago connections (Weisler 2002). The islands of Mangareva surround a lagoon some 25 km across. The largest island, named after the archipelago, is 14 km^2 – more than half of the total land mass of the group. The six largest volcanic islands are steep sided, with one or more crescent-shaped embayments fronting narrow coastal flats that evidence prehistoric settlements consisting of households defined by stone pavements and terraces, dryland and irrigated gardening systems, middens and rockshelters (Weisler 1997c: figure 9.1). The earliest sites date to the eleventh to thirteenth centuries CE (Kirch *et al.* 2010: 78; Green and Weisler 2000, 2002). Aside from having the best agricultural soils and potable water sources in southeast Polynesia, the Mangareva lagoon has abundant stocks of Black-lipped pearlshell used to fashion a range of fish hooks, vegetable peelers and ornaments. Despite an archipelago-wide survey (Weisler 1996), sources of fine-grained basalt for manufacturing adzes and other cutting tools were not located. However, vesicular basalt for oven stones is plentiful and Mangareva was undoubtedly the source for the Pitcairn Group of all introduced commensal animals (pig, dog and rat), planting stock such as coconut, bananas, Giant swamp taro (*Cyrtosperma* sp.), candlenut (*Aleurites* sp.), the ornamental *Hibiscus*, and *Cordyline* whose long and broad leaves were used for bundling food parcels for earth oven cooking and whose roots provided a starch-rich food

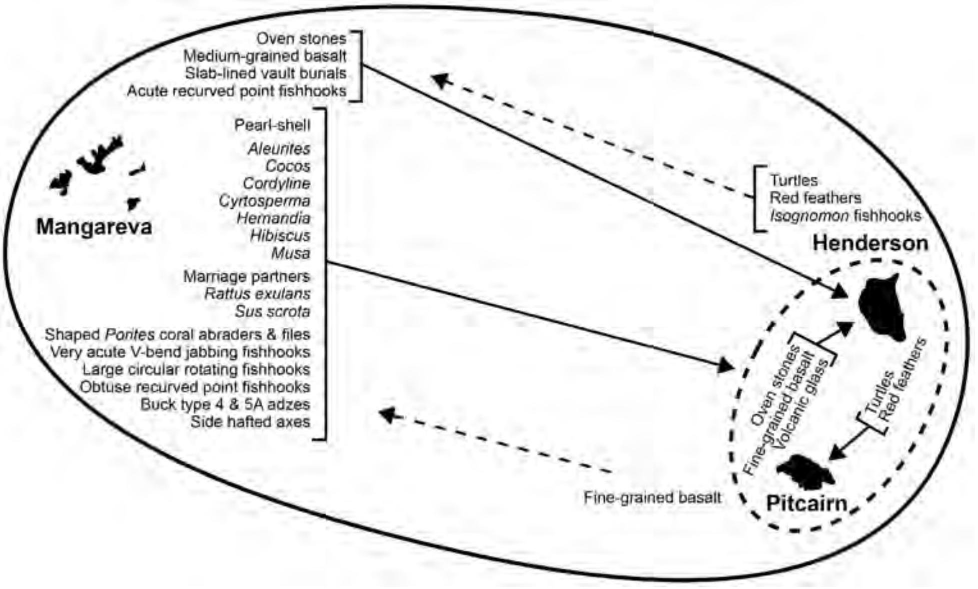

Figure 4.7.4 The Mangareva–Pitcairn interaction sphere (from Green and Weisler 2002)

when cooked. In summary, then, Mangareva was the source of commensal animals, cultigens and other economically useful plants, oven stones, pearlshell, and undoubtedly marriage partners to the resource-poor islands with small isolated communities that could, however, supply fine-grained basalt, volcanic glass and perhaps turtles and red feathers. Figure 4.7.4 illustrates the southeast Polynesian interaction sphere based on extensive excavations and detailed geochemical studies of artefacts (adze material, volcanic glass tools and oven stones) and geological sources (Weisler 1995; Weisler and Woodhead 1995; Woodhead and Weisler 1997).

Considering the radiocarbon dating corpus and distribution of imported artefacts on Henderson, island colonization is suggested by about the eleventh century CE, with the period of voyaging between Pitcairn and Henderson, and from the Pitcairn Group to Mangareva, continuing until 1450 CE. By the early 1400s, there is a decline of imported materials (especially artefacts made from Mangarevan pearlshell and Pitcairn fine-grained basalt and volcanic glass), signalling the end of external resources reaching the isolated communities in the Pitcairn Group with abandonment of Henderson (and probably Pitcairn) by the early 1600s. A lifeline provided by the circulation of vital external resources from resource-rich to resource-poor islands has also been documented for areas in Micronesia (Alkire 1965) and in the Mediterranean (Cherry 1985). In all examples, especially for the Pitcairn Group–Mangarevan interaction sphere described here, commodities (such as adzes and cultigens) and marriage partners were required to sustain isolated communities and the occasion provided the opportunity to circulate prestigious products (such as red feathers and perhaps turtle meat). In this latter regard, the isolated communities were not just on the receiving end. That is, they did supply resources that were depleted or extirpated from the parent group.

In the example of the Pitcairn Group–Mangareva interaction sphere, the isolated communities of the Pitcairn Group could only be sustained by repeated resourcing from the parent populations on Mangareva. This interaction sphere, at the margins of southeast Polynesia, was clearly tied into the broader and more distant archipelagos of East Polynesia. There is archaeological evidence for Mangareva receiving stone adzes from the Society Islands and the Marquesas (Weisler and Green 2001). So it is likely that events taking place at these distant island groups eventually filtered back to the Pitcairn Group. For example, during late prehistory across East Polynesia, human populations were at their highest, marine resources (shellfish stocks, turtles and fish) and birds were universally depleted, and inter-social tension, status rivalry and aggression were on the rise. This is well documented archaeologically (Green and Weisler 2000; Kirch *et al.* 2015). In Mangareva during late prehistory food scarcities drove people to steal growing crops and rob breadfruit storage pits (the main staple), and there are even instances of fresh meat cannibalism and unearthing graves of newly buried corpses for food (Goldman 1970). In Mangareva, agricultural production and therefore arable land was at a premium since this was now the supreme expression of wealth (Buck 1938: 146; Goldman 1970: 150) and a major factor in competitions for status rivalry. Consequently, constructing 'expensive' voyaging canoes and resourcing their crews was no longer a priority. Indeed, it was risky to leave agricultural lands unprotected to engage in long-distance voyaging trips. The small human communities of the isolated, diminutive, and resource-poor islands of the Pitcairn Group were, indeed, part of this much larger global community of East Polynesia and events that took place even hundreds of kilometres distant had a decided, and in this example, negative effect on sustaining isolated landfalls at the margins of southeast Polynesia.

New Zealand – connectivity in isolation on a large continental island

Major differences between New Zealand and the tropical homeland provided opportunities for the new settlers, but also placed limitations on earlier lifeways. The most striking difference is geology; New Zealand is a continental land mass with highly variable landforms and a diversity of stone types. Tropical East Polynesian islands are volcanic and less geologically complex. New Zealand lies south of the tropical zone and, with a north–south orientation, spans climatic zones ranging from sub-tropical to sub-Antarctic. The tropical Polynesian horticultural system was unviable in New Zealand; only a few crop plants would grow in the colder climes and horticulture was effectively limited to the northern two-thirds of the country. Dogs were introduced, but pigs and fowl, two mainstays of the Polynesian domestic economy, were not. Offsetting these limitations, New Zealand supported a rich biomass of easily won meat resources and the hunting of sea mammals and birds (including the flightless Moa) quickly became an important part of the economy, alongside fishing and shellfish gathering.

Lying 3,000 km from the homeland, the most significant issue for the first colonists was isolation. Regular two-way voyaging between colony and homeland was unviable and the colonists could not rely on any sort of 'lifeline' to the parental community. Although the island(s) of departure are currently unknown, New Zealand was settled out of an active interaction zone spanning the southern Cook Islands, the Australs and perhaps the southwest Society Islands (Weisler 1997a). The actual date for New Zealand settlement has been hotly debated, but a consensus is now emerging around the view that the major colonization event occurred early in the fourteenth century CE (Walter *et al.* 2010). This period is remarkably well preserved and provides insight into colonization and the role of interaction. Although New Zealand was isolated from the tropics from first settlement, new networks of interaction evolved rapidly – rapidly enough to suggest that network behaviour was an integral part of the colonization process.

There are no archaeological sites dating earlier than 1300 CE, but by the mid-fourteenth century sites are found from the far north to the far south of the country. New Zealand was

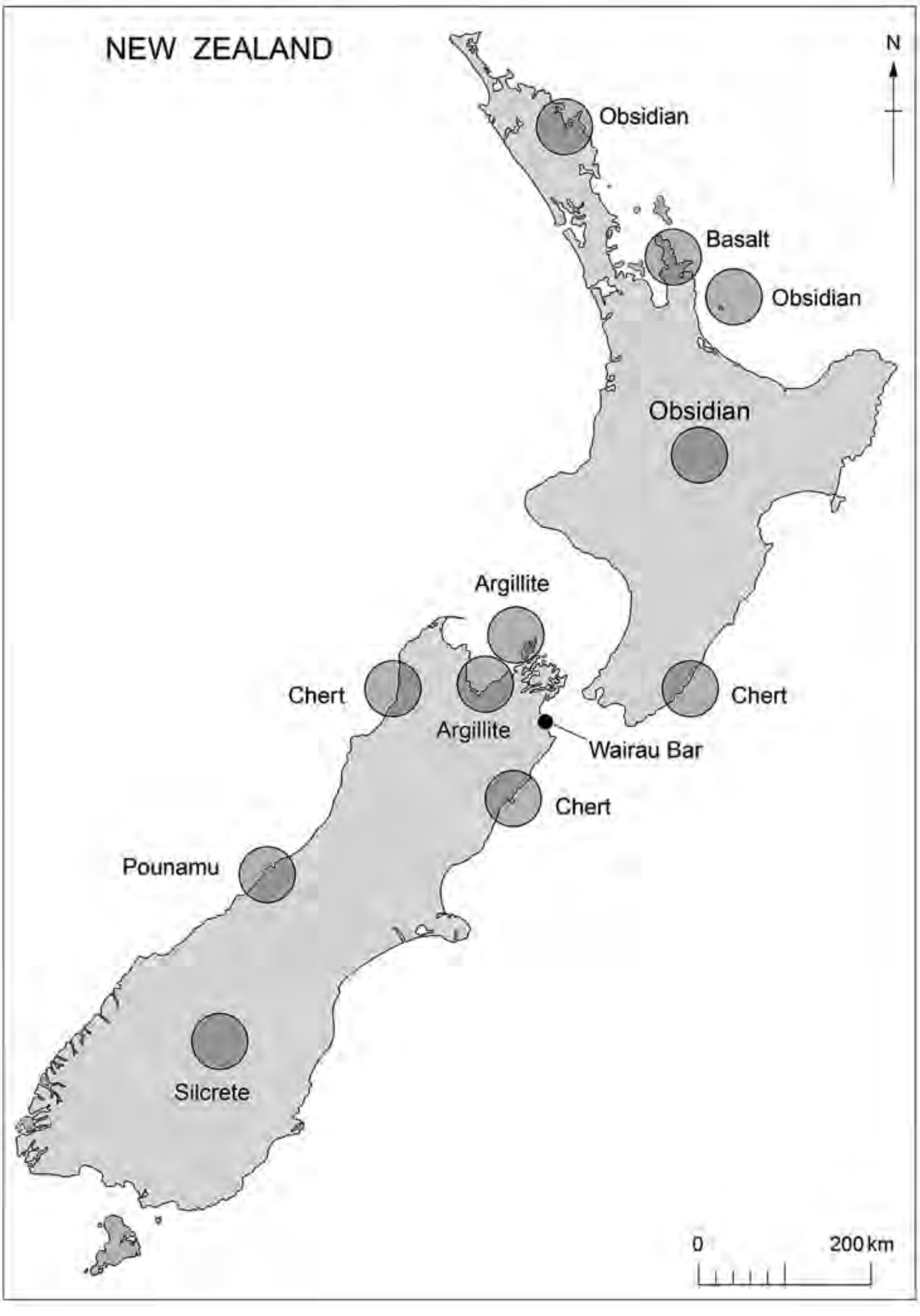

Figure 4.7.5 Source zones, distribution of Mayor Island obsidian and major adze stone in use by 1400 CE

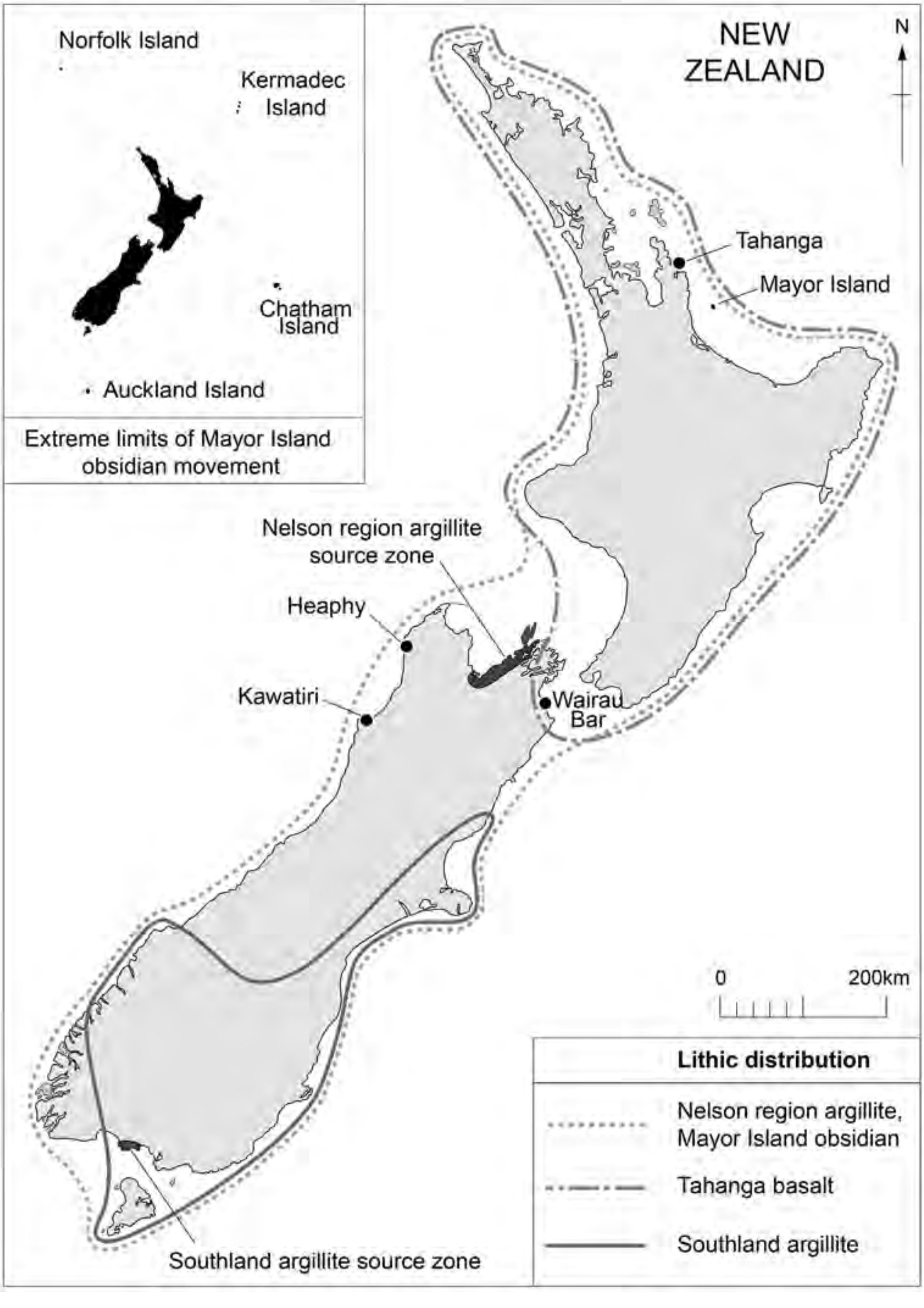

Figure 4.7.6 Geological origin of stone recovered from the Wairau Bar site (*c.*1320 CE)

not settled through a wave of expansion but by the establishment of multiple, small settlements sited in strategic locations around the country. Many of these communities would have been economically unviable as isolated settlements, but high levels of mobility during the fourteenth century led to the emergence of a communication and exchange network linking distant communities into a functioning collective. The evidence for this is found in the record of stone tool production and distribution.

In contrast to the patchy distribution of resources in the topics, New Zealand has a wide range of adze-grade stone including basalts, gabbros, greywackes, nephrites (*pounamu*) and argillites. All these types were discovered rapidly; in fact, exploration was so rapid that all major high-grade industrial sources appear to have been discovered before 1400 CE. Three sources of adze stone stand out as particularly important in the early period and the source location and archaeological distribution of stone from these sources in fourteenth-century sites is shown in Figure 4.7.5.

New Zealand is also rich in flakeable stone suitable for the production of smaller edged tools – a resource that is poorly represented in the tropics. These include obsidian, cherts, porcellanites, flints and silcretes. Obsidian, found in three North Island geological zones, is useful for tracing the development of interaction networks (Figure 4.7.6). The most important source was on Mayor Island and it was one of the most widely used of all New Zealand industrial stone sources. It is not only found in fourteenth-century sites all over the country; it has been identified in the earliest known sites in the Kermadecs, Norfolk Island, Auckland Islands and Chatham Islands (Walter *et al*. 2010: 503).

The best model of the colonization phase interaction network can be developed by examining a single site – Wairau Bar in the Marlborough region. Wairau Bar is a colonization phase site as early as any other site in the country. Figure 4.7.6 shows the location of lithic resources identified at Wairau Bar and demonstrates that despite its first-generation status, the occupants participated in a network that spanned the entire country.

The founding population of New Zealand, estimated at about 500 based on mtDNA variability (Whyte *et al*. 2005), grew and dispersed rapidly. The key mechanism for colonization was the development of an interaction network allowing settlements to be established in strategic, but marginal, locations. For example, many fourteenth-century sites were located in marginal zones, such as the southern and western coasts of the South Island that were effectively abandoned by the fifteenth century and remained so until European arrival. Sites like Heaphy and Kawatiri are like Henderson and Pitcairn: sustainable only with connectivity. That they were connected is evidenced by the rich and varied inventory of their stone tool sources, including obsidian from at least two of the three obsidian zones. The shortest path journey to Mayor Island from Kawatiri is 1,400 km.

Discussion

Interaction and exchange is so much a part of the fabric of Pacific life that they became the major focus of early ethnographic attention. In fact the birth and growth of anthropology as a discipline owes much to pioneering studies of Pacific exchange systems and the insights these provided into cultural processes (e.g. Malinowski 1922). The archaeological study of interaction depends on being able to identify transported objects and, in the near absence of pottery, in East Polynesia this means assigning stone tools to geological origin. Over the last three decades archaeologists have improved their ‘sourcing’ techniques and the spatial extent of prehistoric interaction networks has been reconstructed with increasing confidence. Despite technical advances, however, there has been little progress in understanding the role and origin of interaction.

Only some East Polynesia interaction networks exemplify the notion of 'complex connectivity' (see Clark this volume) as espoused by Jennings (2011, this volume), where interactions are intense, dense, and connected different regions (Knappett this volume). Yet much of the complexity we identified within East Polynesian 'interaction networks' has been obscured by the umbrella term 'interaction network'; a term that masks significant variation in form, function and the underlying drivers of interaction as documented in our four case studies.

The Cook Islands were probably the first group settled out of West Polynesia. They served first as a stepping stone into the more clustered islands of Central East Polynesia and then as a bridge between these two zones. While the Tuamotus certainly connected different regions, on present evidence these connections were not dense and intense (Knappett this volume) hallmarks of complex connectivity – and were solely involved in interaction because of their location – they had little or no resources of export value, but enough resources to be self-reliant. There was little economic reason to travel to the Tuamotus, but their location made them a navigational screen that captured any movement in the region – and no doubt they benefited from this. In contrast, the Mangareva–Pitcairn network was all about economic viability or survival. The small, impoverished and isolated islands of Henderson and Pitcairn were only viable when linked via an interaction network with the richer resources of Mangareva and, indeed, their combined fates were tied to social and economic processes across East Polynesia (Weisler 2002). In essence, the isolated Pitcairn communities were 'globally' connected where local integration was incorporated on the regional stage (Hodos 2010). New Zealand is the only place in East Polynesia that did not participate in inter-archipelago interaction networks. Yet the founding colonies deliberately reproduced the interaction systems of tropical East Polynesia as an instrument of colonization. While the New Zealand example 'illustrates complex connectivity' (Jennings 2011, this volume), there were no inter-archipelago connections; that is, connections to different regions or culturally distinct populations.

In teasing out the blanket concept of interaction, we have highlighted variability in East Polynesian systems. Yet East Polynesian interaction systems also shared certain elements such as a common pattern of an early period of widespread communication and interaction, followed by a contraction of interaction spheres, and changes in basic modes and materials of exchange. It is possible that our focus on the physical advantages offered by interaction behaviour misses the significance of other deep social or cultural drivers. In addition to exchange, interaction networks provide social services such as access to marriage partners of appropriate genealogical distance and participation in socially meaningful secular and sacred transactions (see also Knappett this volume). This must have been particularly important during the colonization phase. We also note the potential role of interaction (and voyaging behaviour more generally) in socio-political and religious contexts. In Melanesia, for example, power and prestige is frequently generated and transferred through successful participation in the interaction systems. As the case studies show, interaction and colonization are not entirely separate enterprises in East Polynesia, so if competition amongst ranking chiefs to dominate interaction networks was a factor of early East Polynesian society, this may go some way towards explaining colonization itself.

Acknowledgements

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Part V

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5.1

East Asia as a laboratory for early globalization

Gideon Shelach-Lavi

When thinking about pre-modern globalization, the first images that usually come to mind are those of the Roman Empire or of the pre-contact societies in the Americas. In contrast, one of the most enduring images of pre-modern East Asia is of an isolated and stable cultural sphere. This representation originates in the idealized descriptions, found in the Chinese classics, of a self-sufficient civilization that has no interest in or need for contacts with societies outside its borders. It was canonized by early Western visitors to the region, who described it as the "unchanging East."

Contrary to such depictions, however, East Asia was the site of some of the earliest and most vibrant webs of inter-cultural contacts and can thus be taken as an ideal setting in which to analyze the roots of globalization, test models of globalization, and compare modern and pre-modern processes. Abundant and clear evidence points to early contacts between East Asian societies and their counterparts in South and West Asia and Europe. This evidence includes not only the spread of sporadic materials and artifacts (e.g. Rawson 2008), but also the dissemination of technologies and symbols, which penetrated receiving societies and were an integral part of the socio-political processes that transformed East Asian societies (e.g. Allard this volume; Shelach 2009). Even more importantly, East Asia itself has since prehistoric times been a heterogeneous region populated by societies of different traditions and economic adaptations. Contacts among these societies took on many attributes that are commonly associated with globalization, such as the development of a certain degree of "homogenization" of cultural habits, socio-political institutions, world-views, etc., on the one hand, and resistance to "homogenization" and the genesis of local traditions, on the other. Evidence of such processes are scattered throughout the historical texts of China, Korea, and Japan, but they are even more ubiquitous in the archaeological data of this region. The archaeological record is especially suitable for addressing pre-modern globalization processes in East Asia, not only because it is free from the same biases that are the source of the idea of the "unchanging East," but also because through it we can learn about the effects of globalization on different social strata and groups, and on areas not represented in historical texts.

Questions related to globalization were rarely addressed in the archaeological research of East Asia. In China, in particular, traditional views of the Yellow River basin as the "cradle of civilization," from which it spread to other parts of China and East Asia, were coupled in the twentieth century with anti-colonial sentiments. Thus, for example, the work of early Western archaeologists working in China, such as Johan Gunnar Andersson, who suggested that early Neolithic cultures in this region are descended from earlier prototypes in Europe, was seen as an imperialist interpretation of the past (Li 2003, 5). While such criticism was not unfounded, it prevented for a long time the development of research on long-range interactions, and even questions of inter-cultural and inter-regional contacts within China were not studied systematically. In Japan and Korea as well, nationalist sentiments often prevented the emergence of a research agenda focusing on the development of local societies in the context of mid- and long-range contacts (Glover 2006). A good example of this is the research on the Koguryo culture (third to seventh centuries CE, Korean 고구려, Chinese 高句麗), which, rather than analyzing how heightened contacts with different regions and cultural traditions were manipulated to create local identity, is usually focused on the national identity of the Koguryo – Korean vs. Chinese (Chen 2012; Levkowitz 2005).

Nonetheless, even under what may be called the "indigenous paradigm" of East Asian archaeology, scholars (local and foreigners) are increasingly paying attention to issues directly related to the concept of globalization. Among the factors contributing to an increased awareness of the archaeological evidence for inter-regional contacts is the use of new scientific methods for tracing the origins of materials and artifacts (e.g. Jin *et al.* 1999; Mabuchi *et al.* 1985). Another factor is the rapid economic development of East Asian countries and the large number of construction projects carried out in regions previously considered "peripheral." Salvage archaeological work which accompanied such construction has not only brought to light remains of local cultures very different from the imagined—and homogeneous—"national" culture (Falkenhausen 1995), but also evidence of contact and mutual influences between different regions (e.g. Falkenhausen 2003; Flad and Chen 2013; Honeychurch 2015; Shelach 2015). On a conceptual level, it can be argued that the increased political and cultural openness of East Asian societies to the outside world since the 1980s (current globalization) has inspired a greater awareness of early examples of inter-cultural contacts and their effects. A pioneer in this respect is K.C. Chang, who suggested that the dominant mechanisms that catalyzed the development of Chinese civilization were the contacts that linked many regional Neolithic cultures (Chang 1986: 234–42). This "Chinese Interaction Sphere" model was initially seen by many as heterodoxy, but it has since become widely accepted and inspired archaeological research on inter-societal contacts, including those which intersect the boundaries of modern national states (e.g. Li 2003).

One issue that should be clarified is the place of China within the East Asian globalizing sphere. A simplistic view might describe China as the core of this region, while the areas around it—including not only Korea and Japan, but also parts of Southeast Asia, as well as the steppe regions to its north and west—are described as the periphery. Thus, it can be argued that a core–periphery model is more suitable for describing the East Asian system. It is true that for most of its history, and especially since the imperial unification in 221 BCE, China was the largest and most dominant political unit of this region, and that its culture, including the Chinese script for example, played an extremely important role in the formation of neighboring cultures and polities. However, a closer examination of the historic and archaeological evidence highlights patterns that are better analyzed within the more flexible framework of globalization.

From a broad geographic perspective, China was always the dominant player in this region, and for most periods it was recognized as such by other players, yet contacts were never one-sided and China did not exploit areas beyond its ever-shifting political borders. Societies and individuals, especially individuals of elite status, throughout this very broadly defined area had much in common with one another, thereby justifying their inclusion in a shared "East Asian sphere." At the same time, political and economic independence and a great deal of cultural and ethnic variability contradict the notion of a comprehensive "Sinification" of this region (Holcombe 2001). Even more important, China itself was always a very heterogeneous region. Under the veneer of shared elite norms, which evolved during the pre-imperial era and were standardized under the imperial political system, there existed much cultural variation, different ethnic identities, religious practices, economic adaptations, and even resistance to the hegemonic elite ideology. While the shared Chinese script was essential for political unification and a shared elite ideology, many mutually incomprehensible dialects and languages coexisted in different parts of China. As a number of the chapters in this volume make clear (Allard; Jaffe; Wu), China itself should be viewed as a region within which heightened connectivity resulted in processes and effects akin to those of modern globalization, not unlike that of the Roman Empire (Witcher this volume). This is not to say that we are dealing with two globalization spheres—within China and outside of it—but rather that the geographic extent of globalization was flexible and it changed in scope and intensity due to political factors, the nature of cultural flows, technological changes, and more.

The so-called Eastern Zhou period (770–221 BCE) is a well-known example of a period of heightened inter-regional connectivity and intense socio-political, economic, and cultural transformations that occurred within the borders of present-day China. The diversity of interaction modes—from state-initiated (wars, diplomatic missions) and elite networks (the movement of advisors, exchange of elite goods, spread of new ideologies), to the popular spheres (movement of populations, commercial networks, the spread of popular religious ideas)—and the range of reactions to such contacts—from increased standardization and homogenization to cultural heterogeneity and the re-embedding of local cultures—are akin to Jennings' definition of globalization (this volume). Moreover, the Eastern Zhou is an ideal period to study the various ways in which different societies reacted to the intensification of contacts and the ways persons of different social strata utilized and manipulated them (Shelach and Pines 2006; Pines 2014).

Well-known examples of extensive interaction webs that incorporate most of East Asia and extend beyond its borders include the maritime trade network that connected port cities in Japan, Korea, and China to Southeast Asia all the way to Java (and indirectly to the Indian Ocean network) between the thirteenth and sixteenth centuries CE (Gipouloux 2009; Robertson this volume). An even more striking example is the Mongol empire of the thirteenth and fourteenth centuries: the largest contiguous land empire in history, controlling almost two-thirds of the Old World and connecting East and West Asia. The extensive long-distance movements of people, materials, artifacts, technologies, and ideas, which occurred during this period as a result of Mongol policies and "bottom-up" commercial and religious initiatives, had transformative effects very similar to those of modern globalization (Allsen 1997; Biran 2014). Buddhism can likewise be seen as a particular type of globalization: it transcended cultural, linguistic, and ethnic boundaries throughout East and Southeast Asia, transforming not only religious beliefs and practices, but almost every other aspect of life as well, including mundane activities such as food-ways and household furniture (Kieschnick 2003). At the same time, it also inspired the genesis of regional and even local identities and modes of expression.

To demonstrate the variability of processes and types of interactions that existed in East Asia, we decided in this section to introduce lesser-known archaeological case studies of globalization. The first chapter, by Gyoung-Ah Lee, addresses the broad prehistoric foundations of the East Asian globalizing sphere by analyzing the spread of domesticated plants. While this was often a slow and cumulative process, it involved long-distance movement of fundamental ideas and technologies that, in the long run, transformed East Asian societies. Early forms of interaction and incipient creation of a globalizing sphere, in this case a maritime-based sphere that includes parts of present-day Japan and Korea, is addressed in the chapter by Ilona Bausch.

It emphasizes the dissemination of cultural traits, such as ornaments and ceramic forms, and asks if such archaeological evidence can be used to define ancient globalization. A more limited region is also addressed by Yitzchak Jaffe, who focuses on mainly on North China. Jaffe suggests that the creation of a shared cultural language through the use of bronze vessels during the Western Zhou (*c.* 1046–771 BCE) is best seen not as an instance of colonization, but rather as a globalization process whose roots precede the formation of the Zhou polity.

The next two chapters address more or less the same period from different geographical perspectives, both located outside the region considered as the core of the East Asian sphere: Francis Allard addresses globalization as evident in the archaeology of Lingnan, a region that includes the southernmost parts of present-day China and the northern part of Vietnam. He addresses evidence for interactions on different geographical scales, changes in the intensity of those interactions as a result of the consolidation and expansion of the Chinese Empire, and how such changes affected local reactions to processes of globalization. The chapter by Bryan Miller and Ursula Brosseder is the broadest in geographic scope; focusing on the archaeology of Mongolia, they discuss evidence of an array of contacts, not only with China, but also with regions far to the west. Interestingly, Miller and Brosseder find that, despite clear evidence of intensive networks of interaction, the effect of those networks on local society was different than predicted by the globalization model. The final chapter, by Mandy Jui-man Wu, looks at globalization from a different, more personal perspective: that of a foreigner residing in north China during the sixth century. The mixing of ethnic and cultural identities typical of this period allows for a particularly nuanced understanding of globalization and its effects.

Many of the chapters in this section, while using globalization as the framework within which to examine their case studies, also challenge its applicability and rigid definitions. Rather than demonstrating a theoretical weakness, these chapters point to one of the advantages of stepping away from the modern and mainly Western definition of globalization and exploring different periods and cultural traditions. By doing so we not only expand the scope of our understanding of inter-cultural and inter-regional contacts and their effects, but also challenge and refine our original understanding and definition of globalization itself.

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5.2

The spread of domesticated plant resources in prehistoric northeast Asia

Gyoung-Ah Lee

Introduction

Globalization is a heuristic concept applicable to examining profound social, political and economic changes by intense networks. Interdisciplinary approaches, presented in this volume, reveal that globalization does not have to be literally planetary in scope and that it cannot be framed in with a clearly delineated beginning and end. As a certain form of 'connectivity', globalization prevailed in prehistoric times much earlier (Robertson this volume). Not all bursts of interactions, however, measure up to earlier globalization (Jennings this volume). How, then, can we discern globalization-causing connectivity from other, simpler interactions in the past? Movement of people, flora, fauna and objects, which is often manifested in archaeological records, does not necessarily cause globalization.

One important factor in detecting past globalization is the time lapse between the initial appearance of external input (introduced items, people or ideas) and its social outcome. For example, a spread of exotic materials or techniques might have affected recipient societies not right away but sometime later, but a seed of change was embedded from the time of adoption and ultimately became a globalized phenomenon. How long is too long for this time lapse to be considered as a response of globalization? The tempo of change is a major difference between the earlier Trans-Eurasian Exchange and the better documented, later Columbian Exchange (Jones *et al.* 2011). Difference in the tempo of changes cannot be a criterion for excluding a certain form of connectivity.

Having these two questions in mind, this paper attempts to check whether interactions responsible for agricultural spread in northeast Asia reveal certain characteristics of globalization. Sherratt (2006) sees that in the Bronze Age, the isolation was only relative and the adoption of bronze working was mediated through the cultures along the Huanghe (Yellow River), possibly from the Late Neolithic. This chapter examines whether the connectivity of the period prior to the Bronze Age caused globalizing effects and then compares it to the later Bronze Age connections. According to Robertson (this volume), without technological and institutional frameworks, connectivity could never have been sustained, and it was the emergence of an agricultural world that diminished this very limitation. What he calls the 'agricultural' world, however, sounds not like the world at the time of agricultural emergence, but the much later world when agriculture became intensified. This study disentangles the earlier 'connectivity' causing the spread of initial agricultural elements from the later development of fully blown agricultural societies in northern China along the Huanghe and the Korean Peninsula. For this task, 'globalization' or 'certain characteristics' of it should be clarified first.

Through the flow of goods, ideas and people, not just intense networks but also interdependencies formed between disparate regions and cultures (Jennings this volume). Complex connectivity can trigger fundamental effects and changes in both parties involved, which eventually gave rise to globalization (Tomlinson 1999). Knappett (this volume) highlights frequency, strength, content, and directionality of networks as measures of complex connectivity. Content can be explained archaeologically, by revealing movements of people, information and objects. Directionality can be often detected by checking the sequence of occurrence of foreign elements across the landscape. Frequency and strength of interactions, however, are less visible in archaeological manifestations. A way to overcome such constraints is to examine what actually happened in the daily lives of far-flung groups at the onset of interaction and sometime later.

Among the globalization traits that Jennings (this volume) suggests, this paper focuses on local developments of cultural heterogeneity against homogenizing effects of interactions at the beginning of agricultural spread and after. Miller and Brosseder (this volume) also emphasize that intense interactions do not necessarily lead to inter-regional integration or cultural convergence in the framework of core–periphery relations. Shelach-Lavi (this volume) emphasizes a step away from the rigid definition of globalization and urges us to expand the scope of our understanding of inter-cultural and inter-regional contacts and their diverse effects. Cultural variation actually increases during the time of intense interaction, despite some homogenization. Flow between cultures brings homogenization to a degree, but it always involves interpretation, translation, mutation, adaptation and indigenization as the receiving culture brings its own cultural resources to bear, in dialectical fashion, upon 'cultural imports' (Tomlinson 1999). As well as the two sides (heterogeneity and homogenization) of the coin (globalization), this chapter also reviews directionality and content of flow in agricultural spread.

Setting the stage

Along a continuous stretch of the Huanghe, distinctive regional Neolithic cultures developed in diverse landscapes from the Terminal Pleistocene–Early Holocene boundary, but regional overlap through interactions became apparent in later Neolithic periods (Chang 1986). The upper Huanghe refers to arid northwest China, including the most of Inner Mongolia and the three modern-day provinces of Xinjiang, Gansu and Qinghai (Figure 5.2.1). A particularly well-documented region is the Central Plain in north-central China along the middle Huanghe, a cradle of early Chinese civilizations. Shandong province is situated in the lower Huanghe basin. Northeast China, locally called Dongbei (Manchuria, previously) encompasses Heilongjiang, Liaoning and Jilin provinces and eastern Inner Mongolia.

This chapter examines agricultural succession in two stages, despite a risk of segmenting a continuous process, in order to articulate the applicability of the concept 'globalization' in earlier and later agricultural developments. The first stage represents the dispersal of two indigenous domesticates of northern China (foxtail millet, *Setaria italica* ssp. *italica* and broomcorn millet, *Panicum miliaceum*) and rice (*Oryza sativa*) of southern Chinese origin. Domesticated East Asian millets appeared earlier in some parts of the Huanghe region and Inner Mongolia, dating arguably as far as back as 10,000 cal. BP, while they show up later in Korea by 5500 cal. BP, from the Middle Neolithic (locally known as Chulmun) (Crawford and Lee 2003), or possibly by

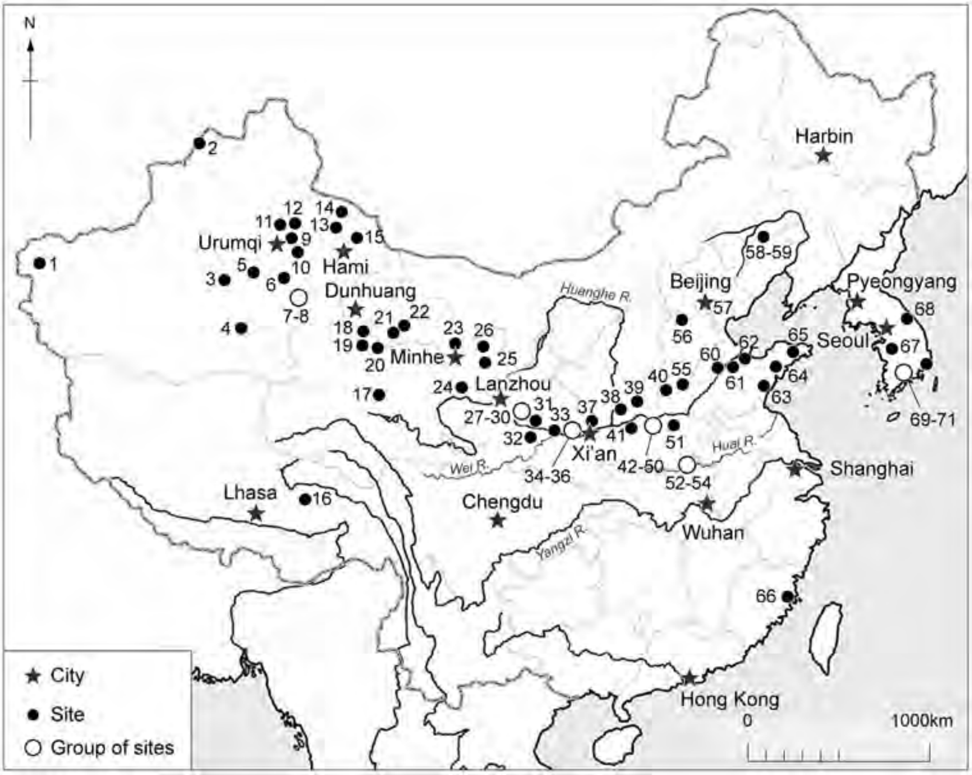

Figure 5.2.1 Map of sites mentioned in the text. 1. Wuper, 2. Xiakalangguer, 3. Qunbake, 4. Zahongluke, 5. Chawuhugou, 6. Xintala, 7. Gumuogou or Gawrighul, 8. Xiaohe, 9. Luanzagangzi, 10. Yanghai, 11. Xicaozi, 12. Sidaogou, 13. Lanzhouwanzi, 14. Tudun, 15. Yanchi Gucheng, 16. Changguogou, 17. Dalitaliha, 18. Huoshaogou, 19. Shaguoliang, 20. Xihetan, 21. Ganggawa, 22. Huoshiliang, 23. Donghuishan, 24. Fengtai, 25. Mozuizi, 26. Huangniangniangtai, 27. Qinweijiq, 28. Buziping, 29. Lixian, 30. Qin'an, 31. Dadiwan, 32. Xishanping, 33. Shangguancun, 34. Zhaojialai, 35. Wangjiazui, 36. Zhouyuan, 37. Nansha, 38. Shizitan, 39. Taosi, 40. Yinxu, 41. Xipo, 42. Tianposhuiku, 43. Huizui, 44. Erlitou, 45. Xinzhai, 46. Fengzhai, 47. Wangchenggang, 48. Zaojiaoshu, 49. Dugangsi, 50. Xijincheng, 51. Peiligang, 52. Tanghu, 53. Baligang, 54. Jiahu, 55. Cishan, 56. Nanzhuangtou, 57. Donghulin, 58. Xinglonggou, 59. Xinglongwa, 60. Jiaochangpu, 61. Yuezhuang, 62. Daxinzhuang, 63. Liangchengzhen, 64. Zhaojiazhuang, 65. Zhaogezhuang, 66. Huangguashan, 67. Daechonri, 68. Munamri, 69–70. Nam River sites (Locality Oun 1, Sangchon B), 71. Pyeonggeodong, 72. Tongsamdong

7/6000 BP (Cho *et al.* 2014; Obata and Manabe 2014) (see Table 5.2.1). By 8000 cal. BP, rice appeared sporadically far from its origins, to the middle and lower Huanghe. Rice probably was not incorporated into Korea until 3500 cal. BP (Crawford and Lee 2003).

The second stage enlists the spread of two southwest Asian crops, wheat and barley, into an existing agricultural realm. The timing of early wheat in northeast Asia is arguable. The sparse presence of wheat is documented as early as 4600–4200 cal. BP in a vast strip of northern China.

Table 5.2.1 Chronology in study areas

Neolithic subphases	*Northwest Upper Huanghe*		*Northcentral/Central Plain Middle Huanghe*		*Eastern Lower Huanghe*		*Northeast (Dongbei) Liaodong/Inner Mongolia*		*Southern Korea*	
Early	Dadiwan	7900–7200	Hebei, Cishan	85/8000–7500	Houli	8500–7500	IM, Xinglongwa	8200–7400	Incipient Chulmun	8000–6500
			Peiligang	9000–7000			Liaoning, Xinle	7300–6800	Early Chulmun	6500–5500
Middle	Banpo	6300–6000	Yangshao	7000–5000	Beixin	7500–6300	IM, Zhaobaogou	7400–6500	Middle Chulmun	5500–3000
	Miaodigou	5700–5500			Early-Mid Dawenkou	6300–5000	IM, Hongshan	6500–5000	Late Chulmun	3000–45/4000
	Late Yangshao	5500–5000								
Late	Majiayao	5300–4200	Longshan	5000–4000	Late Dawenkou	5000–4600	IM, Fuhe	5200 BP	Final Chulmun	45/4000–3500
	Changshan	5000–4500			Shandong Longshan	4600–3900	IM, Xiaoheyan	5000–4600		
					Yueshi		Liaodong, Upper Xiaozhushan	4200–4000		
Bronze	Qijia	4300–3600	Erlitou	3900–3500			IM, Lower Xiajiadian	4200–3400	Early Mumun	3500–2800
	Siwa	3600–2600	Shang/ Upper Erligang	3600–3300					Middle Mumun	2800–2400

Note: All dates are in BP.

‘IM’ Inner Mongolia

Table 5.2.2 Radiocarbon dates from the sites mentioned in the text

Region	*Site*	*Period*	*Lab*	*Taxa*	*uncal. BP*	*cal. BP (1σ)*	*References*
CHINA							
Xinjiang	Xiaohe		BA05803	wheat	3375±45	3680–3570	Flad *et al.* 2006
Xinjiang	Xiaohe		BA05794	wheat	3305±40	3590–3490	Flad *et al.* 2006
Xinjiang	Xiaohe		BA05791	wheat	3225±30	3470–3410	Flad *et al.* 2006
Xinjiang	Xiaohe		BA05804	millet	3545±40	3890–3760	Flad *et al.* 2006
Xinjiang	Xiaohe		BA05795	millet	3200±40	3460–3390	Flad *et al.* 2006
Xinjiang	Xiaohe		BA05793	millet	3240±40	3530–3420	Flad *et al.* 2006
Xinjiang	Xintala		OZL437	wheat	3515±50	3860–3730	Dodson *et al.* 2013
Xinjiang	Xintala		OZJ662	wheat	3435±50	3800–3640	Dodson *et al.* 2013
Xinjiang	Xintala		OZM451	wheat	3435±35	3780–3650	Dodson *et al.* 2013
Xinjiang	Xintala		OZK663	wheat	3430±50	3790–3630	Dodson *et al.* 2013
Xinjiang	Sidaogou		OZK664	wheat	3030±50	3320–3170	Dodson *et al.* 2013
Xinjiang	Sidaogou		OZK665	wheat	3080±60	3360–3220	Dodson *et al.* 2013
Xinjiang	Xicaozi		OZM674	wheat	2975±45	3230–3090	Dodson *et al.* 2013
Xinjiang	Wuper		OZL441	wheat	3155±39	3430–3360	Dodson *et al.* 2013
Xinjiang	Wuper		OZL442	wheat	2856±40	3050–2920	Dodson *et al.* 2013
Xinjiang	Wuper		OZK660	wheat	2595±50	2760–2580	Dodson *et al.* 2013
Xinjiang	Wuper		OZK661	wheat	2540±50	2720–2520	Dodson *et al.* 2013
Xinjiang	Wuper		OZK443	wheat	2497±36	2690–2510	Dodson *et al.* 2013
Gansu	Dadiwan	Dadiwan Phase I	BK80025	charcoal	7150±90	8080–7890	GWKY2006
Gansu	Dadiwan	Dadiwan Phase I	BK81022	charcoal	6940±80	7870–7700	GWKY2006
Gansu	Dadiwan	Dadiwan Phase I	BK81024	charcoal	6880±80	7810–7650	GWKY2006
Gansu	Dadiwan	Dadiwan Phase I	BK81021	charcoal	6770±80	7690–7570	GWKY2006
Gansu	Dadiwan	Dadiwan Phase I	BK80007	charcoal	6730±90	7660–7520	GWKY2006
Gansu	Xishanping	Qijia	Tka13890	rice	4430±100	5240–4920	Flad *et al.* 2006
Gansu	Xishanping	Qijia	Tka13889	broomcorn millet	4490±30	5260–5080	Flad *et al.* 2006
Gansu	Qin'an	Qijia		wheat		2400–1800?	An *et al.* 2013
Gansu	Lixian	Qijia		wheat		2400–1800?	An *et al.* 2013
Gansu	Buziping	Qijia		wheat		2200–1800?	Jia *et al.* 2013

Gansu	Mozuizi	Machang		wheat		*c*.2300?	An *et al*. 2013
Gansu	Huoshiliang		OZK603	wheat	3636±44	4050–3900	Dodson *et al*. 2013
Gansu	Huangniangniangtai		OZK418	wheat	3570±60	3950–3770	Dodson *et al*. 2013
Gansu	Ganggawa		OZK658	wheat	3558±47	3920–3770	Dodson *et al*. 2013
Gansu	Shaguoliang		OZK668	wheat	3450±60	3800–3650	Dodson *et al*. 2013
Gansu	Shaguoliang		OZK669	wheat	3390±50	3700–3580	Dodson *et al*. 2013
Gansu	Huoshaogou		OZK671	wheat	2495±45	2690–2490	Dodson *et al*. 2013
Gansu	Huoshaogou		OZK672	wheat	3430±50	3790–3630	Dodson *et al*. 2013
Gansu	Donghuishan		BA92101	wheat	4110±250	4960–4270	Gansu-Jilin 1998
Gansu	Donghuishan		OZK653	wheat	3260±45	3550–3440	Dodson *et al*. 2013
Gansu	Donghuishan		OZK654	wheat	3405±50	3730–3600	Dodson *et al*. 2013
Gansu	Donghuishan		OZK655	wheat	3425±40	3760–3640	Dodson *et al*. 2013
Gansu	Donghuishan		OZK656	wheat	3410±50	3740–3600	Dodson et al. 2013
Gansu	Donghuishan		BA06024	wheat	3250±35	3540–3430	Flad *et al*. 2010
Gansu	Donghuishan		BA06029	wheat	3260±35	3550–3450	Flad *et al*. 2010
Gansu	Donghuishan		BA06030	wheat	3195±50	3470–3380	Flad *et al*. 2010
Gansu	Donghuishan		BA06031	wheat	3265±35	3550–3460	Flad *et al*. 2010
Gansu	Donghuishan		BA06033	wheat	3215±40	3470–3400	Flad *et al*. 2010
Gansu	Donghuishan		BA06034	wheat	3215±50	3500–3400	Flad *et al*. 2010
Gansu	Donghuishan		BA06036	wheat	3225±35	3480–3410	Flad *et al*. 2010
Gansu	Donghuishan		BA06037	wheat	3240±35	3520–3420	Flad *et al*. 2010
Gansu	Donghuishan		BA06038	wheat	3195±35	3450–3390	Flad *et al*. 2010
Shaanxi	Zhouyuan	Longshan		wheat		*c*.2300?	An *et al*. 2013
Shaanxi	Zhouyuan	Xianzhou		wheat		*c*.1500?	An *et al*. 2013
Shaanxi	Nansa		OZM458	wheat	3300±30	3570–3490	Dodson *et al*. 2013
Shaanxi	Nansa		OZM459	wheat	3260±35	3550–3450	Dodson *et al*. 2013
Shaanxi	Nansa		OZM460	wheat	3275±30	3550–3470	Dodson *et al*. 2013
Henan	Huizui	Late Longshan	SNUAMS04416	rice	3640±60	4060–3890	
Henan	Tianposhuiku	Upper Erligang	TO11420	wheat	3020±50	3310–3150	Lee *et al*. 2007
Henan	Tanghu	Peiligang	GZ1948	charcoal	5110±34	5910–5780	Zhang *et al*. 2012
Henan	Tanghu	Peiligang	GZ1946	charcoal	6248±38	7240–7100	Zhang *et al*. 2012
Henan	Tanghu	Peiligang	GZ1947	charcoal	6752±34	7650–7590	Zhang *et al*. 2012

(continued)

Table 5.2.2 (continued)

Region	*Site*	*Period*	*Lab*	*Taxa*	*uncal. BP*	*cal. BP (1σ)*	*References*
CHINA							
Henan	Tanghu	Peiligang	GZ1945	charcoal	6991±34	7900–7790	Zhang *et al*. 2012
Henan	Tanghu	Peiligang	GZ1953	charcoal	3297±41	3580–3480	Zhang *et al*. 2012
Henan	Tanghu	Peiligang	GZ1952	charcoal	4030±44	4570–4450	Zhang *et al*. 2012
Henan	Tanghu	Peiligang	GZ1951	charcoal	4755±45	5570–5380	Zhang *et al*. 2012
Henan	Tanghu	Peiligang	GZ1950	charcoal	5603±52	6440–6330	Zhang *et al*. 2012
Henan	Tanghu	Peiligang	GZ1949	charcoal	6242±51	7240–7060	Zhang *et al*. 2012
Shanxi	Taosi	Longshan		barley		4500–3900?	
Hebei	Cishan		GZ1982	broomcorn millet	6780±57	7670–7600	Zhao 2009
Hebei	Cishan		?	charcoal			IACASS 1991
Shandong	Yuezhuang	Houli	TO11865	rice	7050±80	7950–7800	Crawford, Chen and Wang 2006
Shandong	Yuezhuang	Houli	BA081608	broomcorn millet	6900±35	7780–7700	Crawford *et al*. 2013
Shandong	Zhaojiazhuang	Longshan	BA061052	wheat	3905±50	4410–4270	Dodson *et al*. 2013
Shandong	Zhaogezhuang	Yueshi		wheat		1800–1500?	An *et al*. 2013
Shandong	Liangchengzhen	Late Longshan	TO10206	rice	3610±60	3310–3110	Crawford *et al*. 2005
Inner Mongolia	Xinglonggou	Xinglongwa		broomcorn millet	?	7670-7610	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK1389	charcoal?	5660±170	6660–6310	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK1390	charcoal?	6895±205	7930–7580	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK1391	charcoal?	7470±115	8380–8170	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK1392	charcoal?	7240±95	8160–7990	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK1393	charcoal?	6965±95	7900–7710	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK3070	charcoal?	6694±48	7600–7520	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK3074	charcoal?	5425±53	6280–6170	Shelach and Tang 2013
Inner Mongolia	Xinglongwa	Xinglongwa	ZK3075	charcoal?	5133±54	5940–5780	Shelach and Tang 2013

KOREA							
Gyeonggi	Neunggok	Middle Chulmun	Beta252973	foxtail millet	4740±40	5565–5365	Lee 2011
South Gyeongsang	Pyeonggeodong	Middle Chulmun	B252972	broomcorn millet	4340±40	4970–4870	GDICHC 2011
South Gyeongsang	Pyeonggeodong	Middle Chulmun	UCI67219	broomcorn millet	3940±20	4430–4350	GDICHC 2011
South Gyeongsang	Pyeonggeodong	Middle Chulmun	KCCAMS60748	azuki	4350±25	4950–4870	GDICHC 2011
South Gyeongsang	Pyeonggeodong	Middle Chulmun	KCCAMS60749	azuki	4175±25	4800–4660	GDICHC 2011
South Gyeongsang	Pyeonggeodong	Middle Chulmun	SNU252971	soybean	4200±40	4820–4660	GDICHC 2011
South Gyeongsang	Pyeonggeodong	Middle Chulmun	IAAA71150	acorn	4320±30	4940–4860	GDICHC 2011
South Gyeongsang	Oun 1	Late Chulmun	TO8607	foxtail millet	4030±100	4730–4390	Lee 2003
South Gyeongsang	Oun 1	Late Chulmun	TO8638	Wheat	1250±270	1440–920	Lee 2003
South Gyeongsang	Sangchon B	Late Chulmun	TO8608	foxtail millet	4060±140	4760–4360	Lee 2003
South Gyeongsang	Sangchon B	Late Chulmun	S01302	barley	2200±800	3240–1430	Lee 2003
South Gyeongsang	Pyeonggeodong	Middle Mumun	UCI67222	Wheat	2585±20	2750–2730	GDICHC 2011
North Chungcheong	Daecheonri	Middle Chulmun	SNU00263	charcoal	4400±60	5190–4910	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU00369	charcoal	4240±110	4940–4620	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU00367	charcoal	4590±70	5430–5110	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU00368	charcoal	4490±40	5260–5070	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU06521	barley	4380±60	5110–4890	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU06522	wheat	4590±80	5430–5110	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU06520	rice	2070±60	2120–1970	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU06818	rice	1770±60	1780–1620	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU06819	rice	1800±60	1810–1640	Han *et al*. 2014
North Chungcheong	Daecheonri	Middle Chulmun	SNU06820	rice	1780±60	1790–1630	Han *et al*. 2014

Notes:

- This paper uses conventions for laboratory code abbreviations provided in the journal Radiocarbon. All dates are calibrated with the calibration curve CalPal 2007_HULU.
- Radiocarbon dates in this paper represent 68.3% (1 sigma) calibration, unless mentioned otherwise.
- GWKY, Gansusheng Wenwu Kaogu Yanjiusuo; GDICHC, Gyeongnam Development Institute Cencer of History and Culture.
- Oun 1 and Sangchon B are also called the Nam River sites.

Wheat and barley were incorporated in millet farming by the beginning of the Early Bronze (Mumun) period (3500–2800 cal. BP) in Korea (Crawford and Lee 2003), although unexpectedly early dates and direct AMS dates on charred grains (5430–4890 cal. BP) indicate their presence by the beginning of the Middle Chulmun period (Han, Koo and Kim 2014) (Table 5.2.2).

Stage 1: the spread of crops of East Asian origin

The first widely popularized crop taxa in northern China is broomcorn millet, followed by foxtail millet. Domesticated millets appeared suddenly and extensively in northern China during the Early Holocene. Changes in technology and settlement patterns preceding millet appearance may hold a key to understanding its rather rapid spread. Upper Palaeolithic sites in the northeast yield unprecedented technologies of manufacturing ground stone tools by 23,000–16,000 cal. BP and pottery by 13,000 cal. BP, building pits and hearths possibly by 10,000 cal. BP, and relying on a new set of animal resources such as dogs, pigs, birds, fish, and shellfish by 10,500 cal. BP (Liu and Chen 2012). Such innovations and subsequent Neolithization (Table 5.2.1) are regarded as responses to the changing climate through the Terminal Pleistocene (23,000–19,500 cal. BP), Younger Dryas (12,800–11,600 cal. BP), and the Early Holocene (Bar-Yosef 2011). Early settlements emerged shortly after the Younger Dryas span, sometime after 10,100 cal. BP (Cohen 2011). Settlement patterns, along with material characteristics, distinguish the parallel development of regional clusters. The use of domesticated millets was a shared Early Neolithic tradition. The Dadiwan site in Gansu, Xinglongwa, in Inner Mongolia, and Yuezhuang in Shandong confirmed dates of charred broomcorn millet by 8000 cal. BP, and arguably as early as 10,000 cal. BP (see the debate in Barton *et al.* 2009; Crawford 2009; Zhao 2011). Millet farming was probably a minor component of the overall subsistence of these Early Neolithic settlers (Shelach and Tang 2013).

How do we understand the more or less swift occurrence of millets in various ecological zones and climate conditions? A key to this answer may lie in the situation before the appearance of fully domesticated millets. *Setaria* grass, the ancestral species to foxtail millet, spread widely in northern China at least from the onset of the Holocene (Lu 1998). Wild grasses of *Panicea*e (millet tribe), related to their domesticated counterparts, were exploited during the Late Glacial Maximum, as indicated by starch and phytolith evidence at the Shizitan Locality 9 site (23,000 to 19,500 cal. BP) (Liu *et al.* 2013) and by residue and use-wear patterns on stone tools in the Xiachuan site in Shanxi along the middle Huanghe (Liu *et al.* 2011). Weedy *Setaria* grass was exploited at Shizitan by the Upper Paleolithic period (11,000 cal. BP) (Bestel *et al.* 2014). Aside from these studies, research is lacking on grass use during the Terminal Pleistocene, a transitional period between wild and domesticated millets (Shelach and Tang 2013). It is an educated conjecture that Terminal Pleistocene foragers became more involved with grass exploitation, eventually leading to millet domestication. The next question is when this process resulted in domesticated millets.

The most agreed upon timing for the early domesticated millets is based on direct dates on charred broomcorn grains from Gansu in the west and from Inner Mongolia in the northeast, ranging from 8000 to 7500 cal. BP. Broomcorn millet is rare but present in phase 1 at the Dadiwan site in Gansu (Barton *et al.* 2009), yielding dates on charcoal fragments (8080 to 7520 cal. BP) (Gansusheng Wenwu Kaogu Yanjiusuo 2006) (Table 5.2.2). Along the middle Huanghe, the Cishan site yields a direct date on charred grains of possibly broomcorn at 7670–7600 cal. BP (Zhao 2011). At the eastern end of the Huanghe, the Early Neolithic Holi culture provides evidence of millet and rice farming at Yuezhuang, with a direct date of 7780–7000 cal. BP on broomcorn millet and 7950–7800 cal. BP on rice (Crawford *et al.* 2013). In northeast China, the Xingolongwa culture in the eastern edge of Mongolian Grassland presents early settlements that farmed millet and raised livestock (Zhao 2011). Dates on charcoal from the Xinglongwa site range from 8380 to 5780 cal. BP (Shelach and Tang 2013) (Table 5.2.2). The shapes of the Yuezhuang and Xinglonggou seeds are between those of wild and domesticated broomcorn, indicating that they were undergoing selection but that they were not yet the type of broomcorn millet known from the later Neolithic (Crawford *et al.* 2013). A direct date on broomcorn grains at Xinglonggou is 7670–7610 cal. BP (Zhao 2011). The final stage of domestication in 8000–7500 cal. BP might have been facilitated by sedentism for 2,000 years from the beginning of the Holocene.

The two contrasting hypotheses attempt to explain the origin and spread of millets, that is, the single origin and multi-centre domestications. Cohen (2011) emphasizes interactions among the Early Neolithic cultures in distant but interconnected regions as a major factor of millet spread, rather than a multiple independent emergence of domestication. Millet and rice farming was spread within wide-ranging webs of information exchange and broad social networks, whose roots are in the interactions of Late Palaeolithic hunter-gatherer societies (Cohen 2003). On the other hand, Bettinger *et al.* (2010) propose that the Dadiwan culture domesticated millet independently in northwest China by 7800–7300 cal. BP.

The presence of domesticated millets in a broad regions in North China indicates that millet domestication was initiated much earlier than its first appearance by 8000–7500 cal. BP. The Chisan site in Hebei is a centre of controversy for an early date on its domestication. Lu *et al.* (2009) report phytoliths of both foxtail and broomcorn millets extracted from '47 grain crop samples', which were retrieved from five 'newly excavated' storage pits and from the museum collection of the earlier excavation. Three pits yielded only broomcorn millet phytoliths, dating to 10,300 and 8700 cal. BP, although it is not clear what was actually dated (see the argument in Zhao 2011). The other two pits at Chisan and the museum collection yielded phytoliths of both taxa with later dates, between 8700 and 7500 cal. BP. Lu *et al.* (2009) claim cultivation of broomcorn millet by 10,000 cal. BP at Chisan, but Zhao (2011) warns of the possibility of an old charcoal effect in these dates, as materials used for dating were likely charred fragments of unknown taxa rather than individual grains. Starch, reputedly from domesticated millets as well as from green foxtail grass, is also reported at Nanzhuangtou in Hebei (11,500–11,000 cal. BP) and Donghulin in Beijing (11,000–9500 cal. BP) (Yang *et al.* 2012). If we accept an earlier date prior to 10,000 BP, we need to explain the Terminal Pleistocene foragers' role in initial domestication, prior to sedentism.

From the use of wild *Paniceae* during the Terminal Pleistocene (23,000–19,500 cal. BP) to full millet domestication (~8000 cal. BP) is the period of experimentation with starch resources. Exploitation of *Paniceae* seeds from the Terminal Pleistocene likely paved the way for domestication; the transitional taxa between wild and domesticated were actively harvested and possibly managed along the way. These starchy grains were part of broad-spectrum resource by the Terminal Pleistocene–Early Holocene in several regions of North China (Liu et al. 2013). This practice could be a consequence of independent niche-constructing behaviour and a shared idea transmitted through cultural contacts.

Such interconnectedness and niche-constructing behaviours appeared further east and west in the following millennia. Characteristics of the Neolithic culture appeared across Korea by 8000 cal. BP, including sedentism, pottery making, and ground stone tool technology (Barnes 2015). The earliest confirmed charred millet grains were dated to the Middle Chulmun as early as 5570–5370 cal. BP in the central region (Neunggok site) and 5430–4430 cal. BP in the southern coast (Tongsamdong) (Table 5.2.2). The Munamri site on the east coast demonstrates environmental engineering through agriculture during the Middle Neolithic, as supported by evidence of raised fields and millets dated to 5000 cal. BP (Melvin and Lee 2013), and may support a hypothesis of even earlier adoption of millets, considering a technical sophistication of farming fields. Observed seed impressions on Initial/Early Chulmun pottery along the south coast may support introduction of both millets over one or two thousand years prior to dates on charred grains (Cho *et al.* 2015; Obata and Manabe 2014).

Assuming that introduced crops of Chinese origin entered northern Korea earlier than in the south, the northeast region of China is the place to check for the timing of millet introduction to the Korean Peninsula. No data on early millets is available in North Korea, except for the 1950s publication on the ambiguous identification of millet in the Middle Chulmun context (Lee 2011). In the Liaodong Peninsula, millet remains appeared in the Xiaozhushan culture around 5000 cal. BP. Liaodong is also a cultural hub that links Neolithic cultures in the middle Huanghe with the Korean Peninsula, and many shared material traits can be found in both Korea and Liaodong (Nelson 1993). As millet dates are earlier in southern Korea than in Xiaozhushan culture, it is not clear whether millet was part of trading package between the Liaodong Neolithic and Chulmun cultures, although other material elements, including pottery and reaping knives, were certainly traded between the two. In the region close to the border with North Korea, including the Jichang region, Songnen Plains and Changbai Mountains, agriculture was not introduced until 4000 cal. BP or later (Jia 2007). Further west in the upper Huanghe, millet growing communities were established along the Liao River in Inner Mongolia from the Early Neolithic, locally known as the Xinglongwa culture (8200–7400 cal. BP) (Shelach-Lavi 2015). If grain impressions of the Early Chulmun (7/6000 BP) are taken as evidence of broomcorn introduction to Korea, millets seem to spread quickly but sporadically both in northeast China and Korea.

Dispersal of rice is another good example of interconnectedness across northeast Asia. The earliest presence of rice north of the Yangzi River is from the Jiahu site in Henan, dating as early as 9000–7800 cal. BP (Zhang and Wang 1998). Due to its location on the Huai channels about midway between the Yangzi and Huanghe, Jiahu was probably a hub that connected the Early Neolithic cultures in the north (Peiligang) and in the south (Pengtoushan, 10,000–8400 cal. BP). Jiahu material culture is within the Peiligang cultural sphere, but millet was not found, unlike typical Peiligang cultural sites (Zhao and Zhang 2009). No charred grains of rice were found in typical Peiligang cultural sites, but phytolith evidence at the Tangu site in Henan indicates the arrival of rice in the middle Huanghe as early as 7800–4500 cal. BP (Zhang *et al.* 2012). Further east, the Early Neolithic Houli culture revealed the incorporation of rice into millet farming in the lower Huanghe, as supported by a direct date on charred rice grains at the Yuezhuang site in Shandong (7950–7800 cal. BP) (Crawford *et al.* 2013) (Table 5.2.2).

These data lead to the conclusion that the Early Neolithic Peiligang culture in the middle Huanghe had a selective approach to plant resource use. The Jiahu, Tanghu and Peiligang sites are not far from each other along the Wei channels. The Peiligang site shows both foxtail and broomcorn millets, but no rice. The same holds true for several Peiligang-type sites along the Yiluo River, a tributary of the middle Huanghe (Lee *et al.* 2007). Tanghu has both broomcorn millet and rice, while Jiahu has rice but no millet. Differences in plant use may indicate that interactions brought variation even among the same cultural tradition. Jiahu inhabitants selected materials and technologies of the Peiligang culture, but their appetite was the southerners' diet of the middle–lower Yangzi. Connectivity that facilitated crop spread increased heterogeneity in food preference among Early Neolithic participants amid a homogenization trend of increasing importance of plant resources and their management. Globalization always involves diverse complex and reflexive interactions, not homogeneity (Robertson this volume).

In most cases of early occurrence of rice in North China, its amount and frequency did not measure up to those of millets and/or edible wild plants, implying that calorific staple is not the reason for rice farming there during the Neolithic period. Evidence of fermented rice liquor and rice temper in pottery shows the importance of rice in the realms of ritual and craft production at Jiahu by 9000 cal. BP (McGovern *et al.* 2004). The tradition of using rice for pottery temper is also found at the Shangshan site in the lower Yangzi, dating to 10,000–8000 cal. BP (Jiang and Liu 2006). The presence of rice increased along the Huanghe through the Middle and Late Neolithic periods. Rice travelled further to the west, reaching Gansu by 5240–4920 cal. BP, as indicated by a direct date on rice at the Xishanping site (Flad *et al.* 2010) (Table 5.2.2). Although my earlier work reports rice from the Erlitou period (3900–3500 cal. BP) in the Yiluo valley (Lee *et al.* 2007), phytolith study indicates the practice of rice farming from the Late Yangshao (5500–5000 cal. BP) (Rosen 2007). My ongoing study in the Yiluo region also reveals rice grains in the Late Yangshao context at the Huizui site, but no carbon date is available yet. Instead, rice grains from the Late Longshan Huizui are directly dated to 4060–3890 cal. BP (Table 5.2.2). Even in the Erlitou and later periods, however, rice is outnumbered by millets, indicating that rice was not a staple. Its spatial distribution in the Yiluo basin suggests that the importance of rice farming can be understood in social contexts. Rice was cultivated and consumed only in larger, central settlements from the Late Yangshao to Erlitou periods, implying rice as a luxury food for elites or ritual offering. Regardless how sporadic findings of rice are in North China, rice seems a harbinger, signalling social differentiation and ritualization well before the rise of state-level societies. Rice was contextualized in the recipient culture (as a prestigious/ritual item in the north) differently from the donor (as a stable in the south). On the contrary, South China along the Yangzi River provides very little evidence to support the development of social, economic hierarchies (Shelach-Lavi 2015: 123). Globalization as connectivity provides a workable framework for archaeologists as a way of moving beyond the superficialities of imagined homogeneous and hegemonic cultures (Robertson this volume). The spread of rice is another indication that connectivity brought heterogeneous social response. Globalization has the capacity to trigger social changes (Jennings 2011: 2) and earlier eras of globalization can be identified by demonstrating a correlation between the increased flows of products/people and evidence for the array of cultural changes that are commonly associated with globalization (Jennings this volume). Rice adoption itself did not trigger social changes in the northern Neolithic societies *per se*, but it was a part of the regalia that fortified social trends and changed both food culture and ceremonial practice in the long run.

Stage 2: introduction of southwest Asian crops

The introduction of bronze technology is often regarded as a herald of globalization between east and west. Sherratt (2006) proposes that the development of expanded Bronze Age trade links transferred technologies between the east and west Eurasian civilizations through central Asian connections. Part of this exchange system was the eastward movement of northern Eurasian bronze casting techniques along with southwest Asian domesticates to China, including wheat and sheep, and the counter-flow of Chinese crops westward. These items did not spread simultaneously but sequentially, caprine first during the Yangshao and then wheat later during the Longshan period, before any clear signs of bronze introduction in the middle and lower Huanghe region (Flad *et al.* 2010; Liu and Chen 2012). Westward, the Chinese crop package, most notably broomcorn millet, dispersed to Central Asia by 4500 cal. BP (Fuller and Rowlands 2011), around the same time that wheat was introduced to eastern China. Broomcorn also spread to north-western India as part of a broader ‘Chinese horizon’ by 3900 cal. BP (Boivin *et al.* 2012; Fuller and Boivin 2009: 21).

Wheat remains were found at over 20 sites in China and are believed by and large to be only bread wheat (*Triticum aestivum*) (Flad *et al.* 2010; Li *et al.* 2011) (Table 5.2.2). The timing and direction of wheat spread is not well established (An *et al.* 2013). If proximity to the origin of wheat is considered, the northwest region in the upper Huanghe was most likely the first place of wheat introduction. One of the earliest dates associated with wheat in Gansu is from the Xishanping site in the Tianshui basin (Zhao 2009). At this Middle Neolithic site, charred wheat seeds came from the sediment layers, dating to 4650–4300 cal. BP, based on ^{14}C dates on charcoal and sedimentation rates (Li *et al.* 2007). The flourishing agricultural societies of the Majiayao (5300–4200 cal. BP) and Qijia cultures (4300–3600 cal. BP) were established in Xishanping, as indicated by abundant foxtail and broomcorn millets (directly dated to 5090–5260 cal. BP), rice (5240–4920 cal. BP), oat, barley, wheat and possibly soybean as well as pollen of buckwheat (Li *et al.* 2007) (Table 5.2.2). The upper Huanghe region is characterized by its function as an East–West trade route connection, known as the Hexi Corridor, which later formed a part of the Silk Road. The very location of the Xishanping site at the Hexi Corridor explains the early appearance of southwest Asian crops by 4600 cal. BP. Interestingly, rice probably came from the middle Huanghe basin, indicating that this trade route extended further east. Dodson *et al.* (2013) claim that wheat arrived first in millet-growing regions of Gansu via Russia or Mongolia before 5000 cal. BP and spread further east and west over 300–400 years.

Contrary to Dodson *et al.*'s claim (2013), most dates on wheat from northwest China were dated to 3500 cal. BP, later than those from eastern China, with the exception of the Xishanping site in Gansu (An *et al.* 2013). For example, the Dawenkou and Shandong Longshan cultural sites (4600–4000 cal. BP) yielded wheat remains, including Daxinzhuang, Liangchengzhen, Jiaochangpu, Zhaojiazhuang and Zhaogezhuang as well as the Huangguashan site in Fujian along the southern coast (4000 cal. BP) (Zhao 2009). Barton and An (2014) also emphasize a synchronous occurrence of wheat in China. Two wheat grains from the Late Longshan context (4600–4300 cal. BP) at Lianchengzhen are not directly dated (Crawford *et al.* 2005), while a direct date is available at Zhaojiazhuang (4410–4270 cal. BP) (Table 5.2.2).

Until recently, the popular view was the later adoption of wheat in the Central Plain than in the eastern Huanghe region. Delayed wheat uptake was considered a sign of inherent resistance to the foreign, novel crop in the heartland of Chinese civilization (Fuller and Rowland 2011; Boivin *et al.* 2012). My earlier study reports the presence of wheat in the Yiluo valley only from the Erlitou period, but surmises that wheat was probably grown in the Yiluo region by the Longshan period, considering its presence in Shandong and elsewhere (Lee *et al.* 2007). Recent study shows this prediction was not far from reality. Wheat dating to the Late Longshan was present in Henan, as seen in the Xijincheng (*c.*4300 cal. BP) and Wadian sites (Zhao 2009). Wheat became more visible by 4000–2000 cal. BP, stretching its distribution from Xinjiang (Gumugou or Gawrighul, 4000–3500 cal. BP) and Tibet (Changguogou) to Shandong. In the Central Plain, wheat appeared in several Erlitou culture sites, including Erlitou, Huizui, Xinzhai, Wangchenggang, and Zaojiaoshu and in the Proto-Zhou period Zhouyuan site in Shaanxi (Lee and Bestel 2007; Zhao 2009).

What was the dispersal passage of southwest Asian crops then? The earlier date of wheat at Xishanping may indicate that wheat was brought into China through the northern part of Xinjiang and the Hexi Corridor (Dodson *et al.* 2013). This hypothesis cannot be substantiated without earlier dates of wheat in Russia and Mongolia, preceding the dates in Gansu. Considering the almost simultaneous emergence of wheat, Zhao (2009) proposes two possible routes. First, wheat, sheep and bronze spread into the Eurasian Steppe and were subsequently brought to the Mongolian highland and then to the northern zone of China, reorienting to the south and finally reaching the Central Plain. Similar to the Eurasian Steppe culture, a narrow strip zone where the Great Wall stood was occupied by diverse ‘northern Frontier zone’ cultures. This northern frontier group, flanked by the Eurasian Steppe Bronze culture and Central Plain Erlitou culture, played a significant intermediary role in the spread of southwest Asian domesticate and bronze traditions. Second, the ocean route is based on earlier wheat dates in Shandong and Fujian. Wheat might have spread along the coastal region of the Indian subcontinent and reached southeast Asia as well as the southern coast of China. It continuously moved along the coastal areas of China, and finally reached the Shandong Peninsula. Wheat introduction to Korea may be tied into this ocean route, travelling from Shandong to southwest Korea.

A spread of southwest Asian crops beyond China is obvious in archaeological records, dating to post-4000 cal. BP. Both wheat and barley appeared in Korea during the Early Mumun (3500–2800 cal. BP) (Crawford and Lee 2003). The Mumun period witnessed a significant increase of occupations and expansion to previously unoccupied areas across Korea (Lee 2012).Variations in material culture, particularly the regional pottery types and their appearance in other regions, indicate not only strong local traditions but also increasing inter-regional interactions within some regions in Korea and beyond, including northeast China. Rice, wheat and barley were added to a long-standing farming tradition of millets, azuki and soybean of the Chulmun period (Lee *et al.* 2011). Wheat and barley were often found together in various regions of Korea, in contrast to China. Approximately 18 sites report charred barley and/or wheat, dating to the Early and Middle Mumun (2800–2400 cal. BP) period. No direct date on the Early Mumun wheat is available, but one date from the Pyeonggeodong site in south central Korea shows its association with the Middle Mumun (Center of History and Culture Gyeongnam Development Institute 2011) (Table 5.2.2). Along with wheat, barley was recovered from raised dry farming fields, indicating the firm establishment of multi-cropping of both northeast and southwest Asian crops.

Wheat or barley grains from two Chulmun sites result from post-depositional disturbance, as confirmed in direct dates on them (Table 5.2.2).The possibility of earlier wheat and barley is raised from the Middle Chulmun Daechonri site in southwestern Korea (Han, Koo and Kim 2014). Two direct dates on each grain of wheat and barley range from 5430–4890 cal. BP, matching those on charcoal in association (5460–4620 cal. BP), so far the earliest on record in northeast Asia. This isolated appearance in Korea casts more questions than can be answered at the moment. Considering the extensive flotation recovery of plant remains in China, the absence of barley and wheat dating to the same time to the Middle Chulmun seems culturally significant rather than a research bias. As Barton and An (2014) suggest, the appearance of wheat from 4600 to 4200 cal. BP in a vast strip of northern China (stretching from Gansu to Shandong) may represent a period of swift adoption (resulting in enhanced visibility in archaeological records) sometime after the initial introduction (not yet visible archaeologically). The Middle Chulmun presence of wheat and barley is possibly a rare survival of the initial, sporadic introduction to northeast Asia (Han, Koo and Kim 2014). Recent findings on barley phytolith on Late Yangshao pottery at Mijiaya site (5400–4900 cal. BP) in Shaanxi indicate another earlier, rare evidence of Southwestern Asian crop introduction to Northeast Asia (Wang *et al.* 2016). There may have been multiple routes and multiple sources of wheat dispersal in different times.

During the Mumun period, farming was intensified and became a dominant activity in the subsistence economy, and possibly contributed to early social distinction throughout the period. Preferences of crops seem different across regions (Ahn 2008). By 3500 cal. BP, the Korean Peninsula may have become tied into a globalization process of incorporating the farming practice of East and West crops.

Conclusion

Can we explain the spread of crops in northeast Asia as a globalized connectivity? By proposing regional interactions as a key to Neolithization and the rise of Chinese civilizations, Chang (1986) provides an incentive to see the Neolithic development in the light of globalization. The expansion of regional Early Neolithic clusters prior to 7000 cal. BP eventually led to their linking together, forming the vast network of the 'Chinese Interaction Sphere', for the next millennia to come. Social complexity, as revealed in elite burials, ritual practices and settlement hierarchy, became prevalent in many regions from Gansu in the west to Shandong in the east and Liaoning in the northeast, suggesting political, social and economic shifts. These processes cross-cut many different local cultures and reflect intensified connectivity among societies. According to Chang's model, intensified interactions among regional Middle and Late Neolithic cultures were interlinked with the onset of social complexity.

Unlike Chang's thoughts on Early Neolithic societies as more or less isolated, Cohen (2011) proposes that they developed in interconnected regions in both South and North. The Early Neolithic cultures in China experienced somewhat concurrent changes to a sedentary lifeway and technological breakthroughs as seen in grinding stone tool technology, pottery production and agricultural emergence. The Cishan, Peiligang and Xinglongwa cultures witnessed significant transformation to visible sedentary villages incorporating broad-spectrum economy with farming strategy as early as 8000 cal. BP. Shared decoration motifs and some vessel shapes in northern Chinese Early Neolithic cultures indicate inter-regional communications (Cohen 2011). The size of those villages is far larger than anything seen before; their organization and the evidence for craft production found in them suggest a much more complex society in comparison to anything known before. Strikingly, new evidence of early rice spread suggests that Chang's (1986) interaction sphere initiated earlier than he proposed, from the Early Neolithic. Rice played an increasingly significant role in social distinction in the later Neolithic and Bronze periods, at least in the middle Huanghe basin.

Resonant social changes partly based on improved agricultural sustainability were delayed for a few thousand years until the Middle Neolithic, after the initial appearance of millet in North China. The Middle Neolithic period from 7/6000 cal. BP shows fundamental social changes in North China, possibly as a response to the intensifying regional connectedness. A good example is the wide spread of the Yangshao way of living, especially along several important branches of the Huanghe (Wei, Fen, Yi and Luo). Millets became a Yangshao staple, along with domesticated pigs and caprines. Many sites in the middle and lower Huanghe show a high frequency of millet and well-stocked public millet granaries (Lee *et al.* 2007; Ma 2005). Middle Neolithic social changes were partly based on such increasing agricultural productivity, which sustained dense population centres and increasing competition among them. Social hierarchy is reflected in two-tiered settlements, large walled towns and smaller hamlets (Liu 2004). Funerary practice and initial fertility worship are documented at the Xipo site in Henan (Pechenkina *et al.* 2005). It is also in this period that millet farming spread further west and south to Sichuan (6000–4500 cal. BP) and then into the Tibetan Plateau (4700–4300 cal. BP) (d'Alpoim Guedes 2013). Millet impressions on the Early Neolithic pottery in southern Korea can be explained by growing regional connectedness in East Asia by 7/6000 cal. BP.

Can parallel changes in the Early Neolithic be understood as part of globalization? How fast should the tempo of changes be, to be called globalizing connectivity? Frequency and intensity of connectivity, two of the key elements of globalization (Knappett this volume), are not as visible in the Early Neolithic interactions as in the later Bronze Age globalization. Nevertheless, a critical characteristic of globalization effects appeared during the Early Neolithic. First, connectedness between regional Early Neolithic cultures is evident, but at the same time local distinctions are clear in northern Chinese material culture. Regional interactions sustained throughout and probably even prior to the Early Neolithic might have contributed to increasing homogeneity and heterogeneity of the Neolithic succession in North China – two trends of globalization (Robertson this volume). An archaeological manifestation of globalization can be found in the link between the increased flow of products/people and evidence for the array of cultural changes (Jennings this volume). A seed of globalization in a limited scope was embedded in the Early Neolithic by 8000 cal. BP, not by one element such as crop spread, but by a combination of shared elements. The emergence of millet farming in the Early Neolithic embedded a seed of subsequent, prolonged changes, but was not a direct cause of the changes *per se*. It was in the later Neolithic period that crop dispersal and intensifying agriculture through extended interactions had more significant impact to participating societies, measuring as a more typical globalization.

An introduced crop to northeast Asia also illustrates a critical element of local interpretation of globalized impact. Wheat remained a minor crop in the Central Plain until the Han Dynasty, a thousand years after its initial adoption. The importance of wheat, however, should be understood not in the context of calorific need, but of social demand. For example, wheat, like rice, only occurred in the large centres in the Yiluo valley from the Late Longshan period onward. Barley, similar to rice or wheat, was probably a rarity for a special occasion to brew beer in North China, as documented as an ingredient for brewing beer in the Late Yangshao context (Wang *et al.* 2016). The very reason for their rapid spread across North China lies in its role in social and ideological realms. Wheat and barley, along with rice, was probably a prestigious and symbolic item for the rising elites. In the Korean Mumun culture, the adoption of wheat does not reflect similar social distinctions. It was a minor crop throughout the Early and Middle Mumun period, and, rather than a class-related symbol, wheat and barley can be understood in the context of regional distinction, probably reflecting differences in not only environmental conditions and technological capacity but also distinctive cultural preference across Korea. Southwest Asian crop dispersal to northeast Asia was not an abrupt process, and its significance to its recipients was mediated by local cultural norms and social structures. In that sense, wheat dispersal throughout northeast Asia shows a certain globalizing effect. The processes of long distance connectivity, interaction, exchange and mutual influence emerged gradually and unevenly in northeast Asia.

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5.3

Prehistoric networks across the Korea Strait (5000–1000 BCE)

'Early globalization' during the Jomon period in northwest Kyushu?

Ilona R. Bausch

Introduction

Modern insights into globalization processes and their broader implications for societal developments can increasingly and successfully be applied to situations of great temporal-spatial diversity, as this volume attests. Paramount is Tomlinson's insight (as applied and modified by Jennings) that globalization as complex connectivity – consisting of interregional, interdependent networks linked by 'a "flow" of goods, information, people and practices' – triggers social change (Tomlinson 1999: 2; Jennings 2011: 2, this volume). While integration in macro-scale networks may engender many economic, social and cognitive benefits, globalization processes, by their very nature, have a transformative effect with unpredictable results, as both Feinman and Robertson (this volume) point out. At the micro-scale level, these may have a lasting impact on social identities, either positively or negatively. Conversely, not all inter-regional interactions automatically bring about 'complex connectivity' and social change.

Within the wider processes of connectivity in East Asia, the Japanese archipelago is an odd duck: throughout its history, it alternated episodes of intensive interaction with the outside world and adoption of new ideas and technologies, with long periods of strict isolation and contracting networks, when internal developments fermented into the formation of a very distinctively 'Japanese' culture and society. Of course, the archipelago's remote geographical location within Asia (Figure 5.3.1) has some bearing on the extent of participation in global processes. The closest physical points of contact with the continent are (1) Kyushu to the south, which is only 200 km distant from southern Korea across the Korea Strait, with several small islands such as Tsushima, Iki and the Goto Islands as stepping stones in between, and (2) the northeast Asian route: Hokkaido, connected via Sakhalin and the Kurile islands to the Russian Far East. While the latter has also been important for introducing populations and technologies from north-eastern Asia through time (e.g. Aikens *et al.* 2009), it is northwest Kyushu that time and again has functioned as Japan's primary window on the outside world, and the focal point for far-reaching developments from the first millennium BCE onwards. At that time, the first crucial step in the

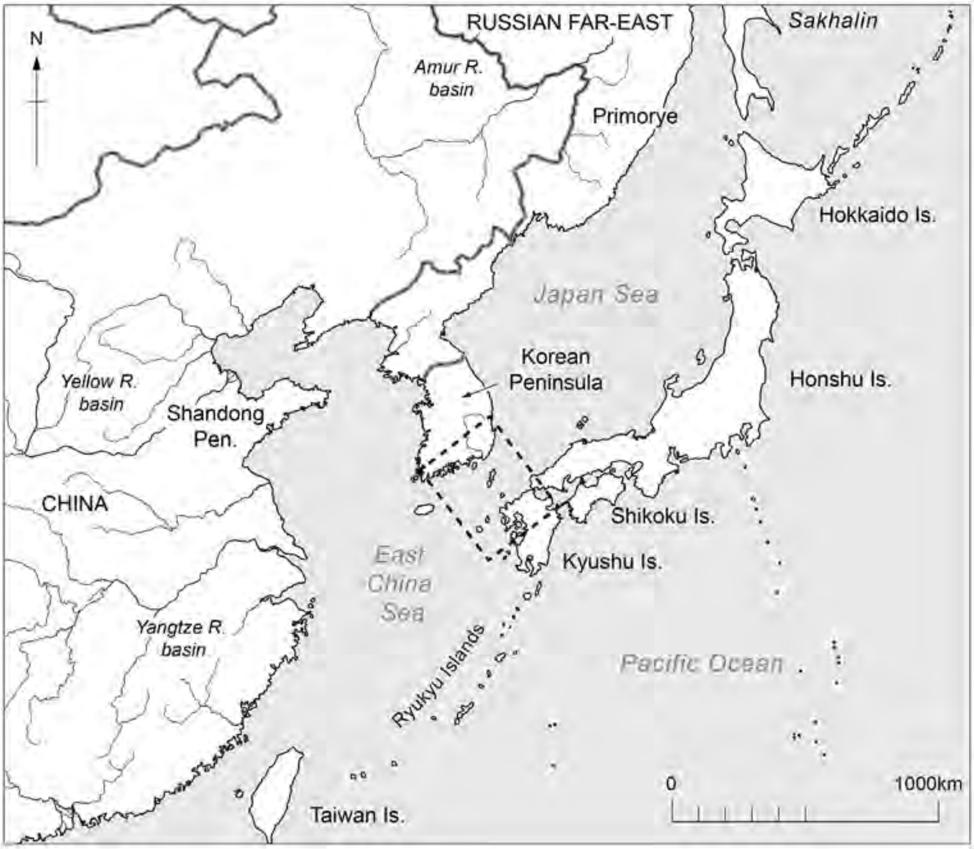


Figure 5.3.1 Map of Japan within East Asia, with the focus area across the Korea Strait: Northwestern Kyushu and Southern Korea (map template courtesy of Junzo Uchiyama/NEOMAP project, Research Institute for Humanity and Nature, Kyoto, Japan [H-04, 2005–2012]). The archipelago consists of four main islands—northernmost Hokkaido, large 'main island' Honshu, small Shikoku neighbouring the western half, Kyushu to its Southwest, plus many smaller islands. Tectonically, it is one of the most active regions in the world (e.g. Barnes 2003) and climatically it covers a range of zones, from sub-arctic Hokkaido to the subtropical Ryukyu island chain.

long-term globalization processes that are often considered as formative for Japan's modern identity took place: the introduction of the rice paddy agricultural system that had originated in China's Yangtze River area millennia before, via immigrants from the Korean Peninsula who gradually ushered in an entirely different material culture (including technical innovations such as metallurgy and loom-weaving), social organization, language and worldview. These were rapidly adopted during the period known as the *Yayoi* period (900 *or* 400 BCE–250 CE, depending on one's definition of '*Yayoi*'), transforming not only the previous subsistence system, but also the pre-existing cultural identity and cognitive system formed during the *Jomon* period (*c.* 14,500–1000 or 400 BCE). Moreover, these developments eventually escalated processes of social stratification and state formation, and, around the third century, integration into the wider world system revolving around the Chinese Han empire (206 BCE–220 CE), albeit from a safe

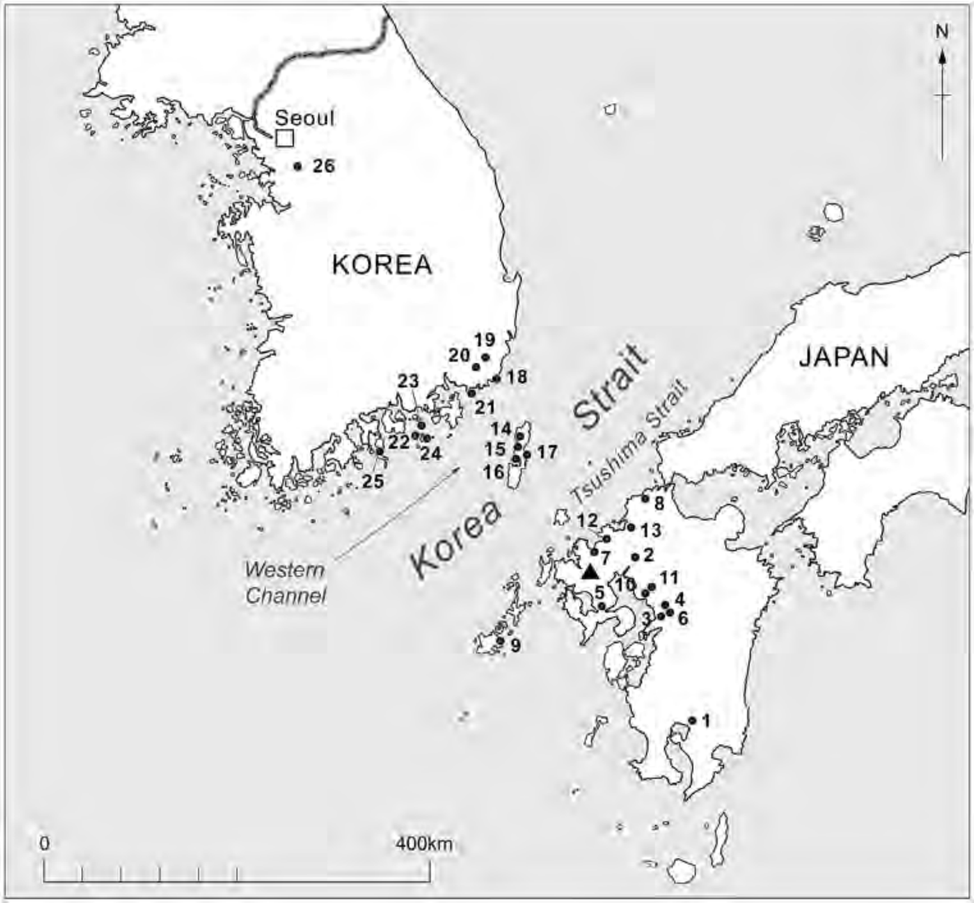


Figure 5.3.2 Map of sites mentioned in the text (adapted from commons.wikimedia.org/wiki/File:Korea_Strait.png, by ChongDae, based on PD map data CC BY-SA3.0. creativecommons.org/licenses/by-sa/3.0/deed.en). Δ Koshidake Obsidian Source. Sites: 1. Uenohara; 2. Higashimyo; 3. Todoroki; 4. Sobata; 5. Ikiriki; 6. Adaka-Kurobashi; 7. Nabatake; 8. Yamaga; 9. Miyashita; 10. Ishinomoto; 11. Kaminabe; 12. Magarita; 13. Itazuke; 14. Koshidaka-Ozaki; 15. Meotoishi; 16. Saga; 17. Yoshida; 18. Tongsamdong; 19. Bibong-ri; 20. Beombang; 21. Janghang; 22. Sangnodaedo; 23. Yondaedo; 24. Yokjido; 25. Ando; 26. Amsadong

distance (Barnes 1986, 2001, 2007; Fujio 2004; Hosoya 2008, 2009; Hudson 1999; Mizoguchi 2002, 2013; Rhee *et al.* 2007; Seyock 2003).

This chapter will explore the nature of early globalization within a prehistoric context by evaluating its applicability to the earliest inter-regional network in the Japanese archipelago with evidence for sustained, intensive interaction with the continent, during the prehistoric Jomon period (14,500–1000 BCE), before these momentous developments took place. The actors belonged to Jomon and *Chulmun* fishing communities from coastal sites across the Korea Strait in northwest Kyushu and southeast Korea, respectively, who both used channel islands such as Tsushima as locales for interaction (Figure 5.3.2). As we shall see below, archaeological evidence for various types of long-term shared practices involving the 'flow of goods, information, and people' spans from 5000 until 1000 BCE. It has been argued (e.g. Hirose 1997) that this long-term network was instrumental in paving the way for the introduction and subsequent adoption of the rice-paddy agricultural system in Japan.

There is insufficient scope in this chapter to answer the complex questions of 'why' and 'how' the Jomon-Yayoi transition successfully took place, but in assessing the extent and impact of these prehistoric interactions among small-scale, pre-urban egalitarian societies, the limits and definitions of the application of globalization theory will be explored: to what extent did these long-term interactive networks involve early globalization processes that generated cultural change?

Early globalization and the 'Korea Strait fishermen interaction sphere'

Evidence for this inter-regional network was first discovered in the 1930s, by Japanese archaeologists excavating the prehistoric Tongsamdong shell midden site near Pusan on the southern coast of Occupied Korea, who discovered a remarkable similarity between the Neolithic Chulmun pottery excavated there, and pottery belonging to Jomon period culture communities in northwest Kyushu. They also speculated that obsidian shards and tools distributed at southeast Korean coastal sites originated from the northwest Kyushu obsidian source *Koshidake* in Saga prefecture (Yokoyama 1933; Oikawa 1933), which was confirmed much later through source analysis (Shimazu 1992: 56; Kuzmin 2012). Excavations at Tongsamdong in the 1960s demonstrated the time-depth for the presence of small quantities of Jomon pottery (Sample 1974), ranging from the Early to the Late phase (*c*.5000–1500 cal. BCE) of the Korean Neolithic Chulmun culture. It soon transpired that the 'stepping stone' Tsushima and Iki islands in the Korea Strait were also occupied by both parties: sites dominated by large quantities of Jomon pottery and evidence of obsidian processing also yielded small quantities of Korean Chulmun pottery, and the reverse. Such evidence further supported the hypothesis that Tsushima Island was probably used as a trade post in the cross-Korea Strait interactions (e.g. Miyamoto 1990, 2008).

Perhaps even more significantly, analysis of the distribution and faunal content of shell midden sites revealed similarities in specialized subsistence strategies and tool assemblages in all three areas (northwest Kyushu, the Korea Strait islands, and the southeastern Korean coast): large, very distinctive two-part composite fish hooks (*c.* 7 cm long when latched together), and composite harpoons made of small saw-shaped obsidian or sanukite microblades (Figure 5.3.3), for targeting large open-sea prey: large-sized fish such as sharks, bonito and tuna, and hunting large sea mammals, respectively, as the content of faunal assemblages at the sites confirmed (e.g. Watanabe 1985, 1988; Komoto 1999).

Furthermore, similarities in non-functional material culture suddenly appearing across the Korea Strait prompted hypotheses on shared social identity and spiritual culture: for example clam shell bracelets (Figure 5.3.4); so-called 'shell masks' (Figure 5.3.5); wild boar clay figurines at a few sites across the Strait (e.g. Kimura 1992; Kim 2011; Kim 1986; Shimazu 1992; Dongsam-dong Shell Midden Museum 2008).

These multiple examples of shared subsistence practices and the exchange of goods, ideas and people at coastal sites between northwest Kyushu and southeast Korea have sparked more comprehensive hypotheses, postulating an interaction sphere among specialized fishers across the Korea Strait (Watanabe 1985; Miyamoto 1990; Imamura 1996; Hirose 1997; Ha 2006; Shin *et al.* 2012).

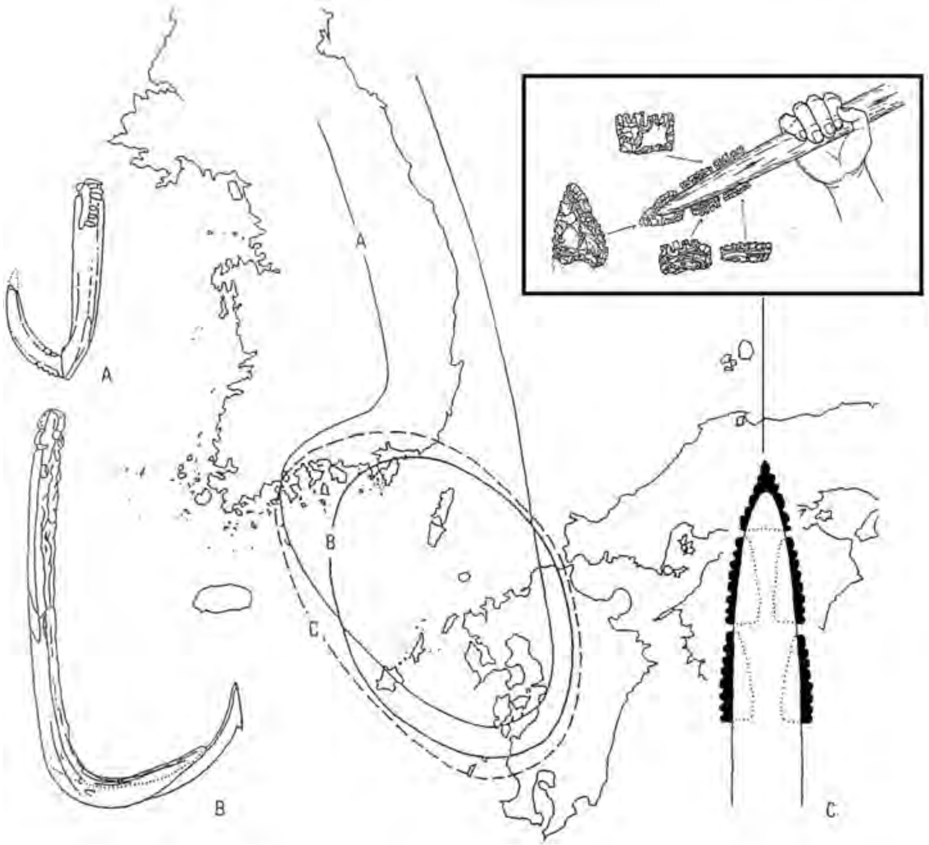
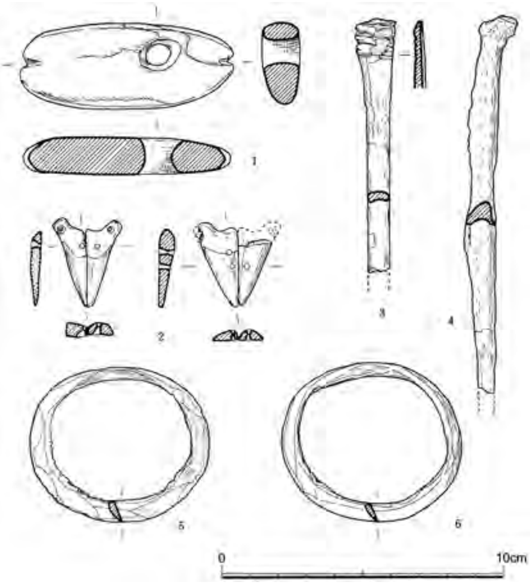


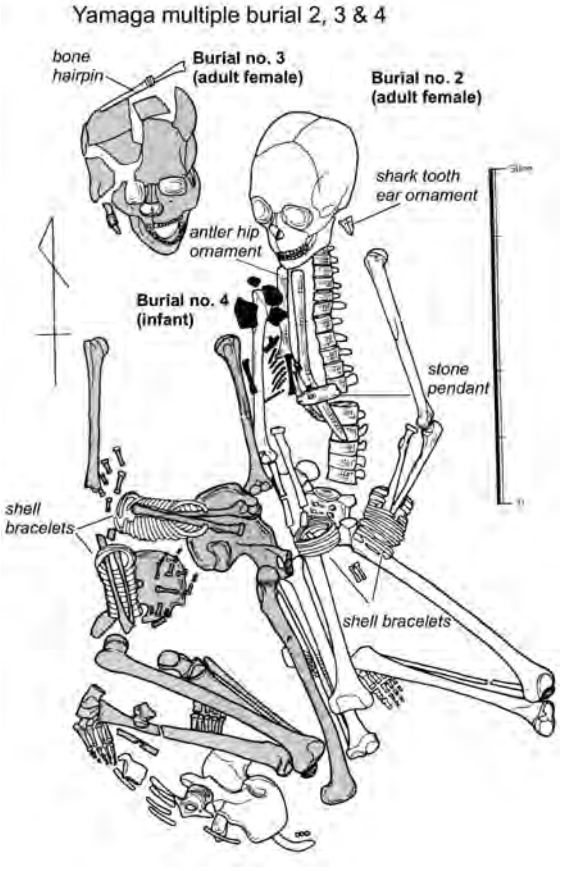
Figure 5.3.3 Shared open-sea fishing technology across the Korea Strait. A: 'Osan-ri' style Korean composite fish hook; B: 'Northwest Kyushu type' composite fish hook; C: composite harpoon, consisting of small saw-like pieces of obsidian or sanukite; (map adapted from Takakura 1995, in Mizoguchi 2013: 122; composite harpoon illustration adapted from Bokcheon Museum 2011: 75)

In order to assess whether these exchange practices truly constitute 'early globalization', the transformative aspect of the interactions over time must be assessed: to what extent did they actually engender cultural change, and affect social identities and worldview? However, it is important to remember that this interaction took place within the context of small-scale, egalitarian communities; the actual quantity of visible archaeological evidence is in fact quite limited, and, in case of organic materials such as fish hooks and shell ornaments, frequently ephemeral. Due to the acid condition of Japanese soil, prehistoric organic materials are only preserved in wetland and shell middens. Thus, within this particular spatio-temporal context, the eight-step methodology proposed by Jennings (this volume) to assess complex connectivity in terms of the *scale* of cultural change (though very applicable in the subsequent Yayoi period) is less useful as an analytical tool. Instead, I propose to use the appearance of *cultural change* in itself as a primary diagnostic to identify early globalization. In a small-scale foraging society, intercultural impact would manifest through significant and lasting innovations in subsistence, settlement patterns, mortuary practices, and the adoption of cognitive aspects such as iconography and ornaments.

a.


10cm

b.


Yamaga multiple burial 2, 3 & 4
bone hairpin
Burial no. 3 (adult female)
Burial no. 2 (adult female)
shark tooth ear ornament
antler hip ornament
Burial no. 4 (infant)
stone pendant
shell bracelets
shell bracelets
0

c.

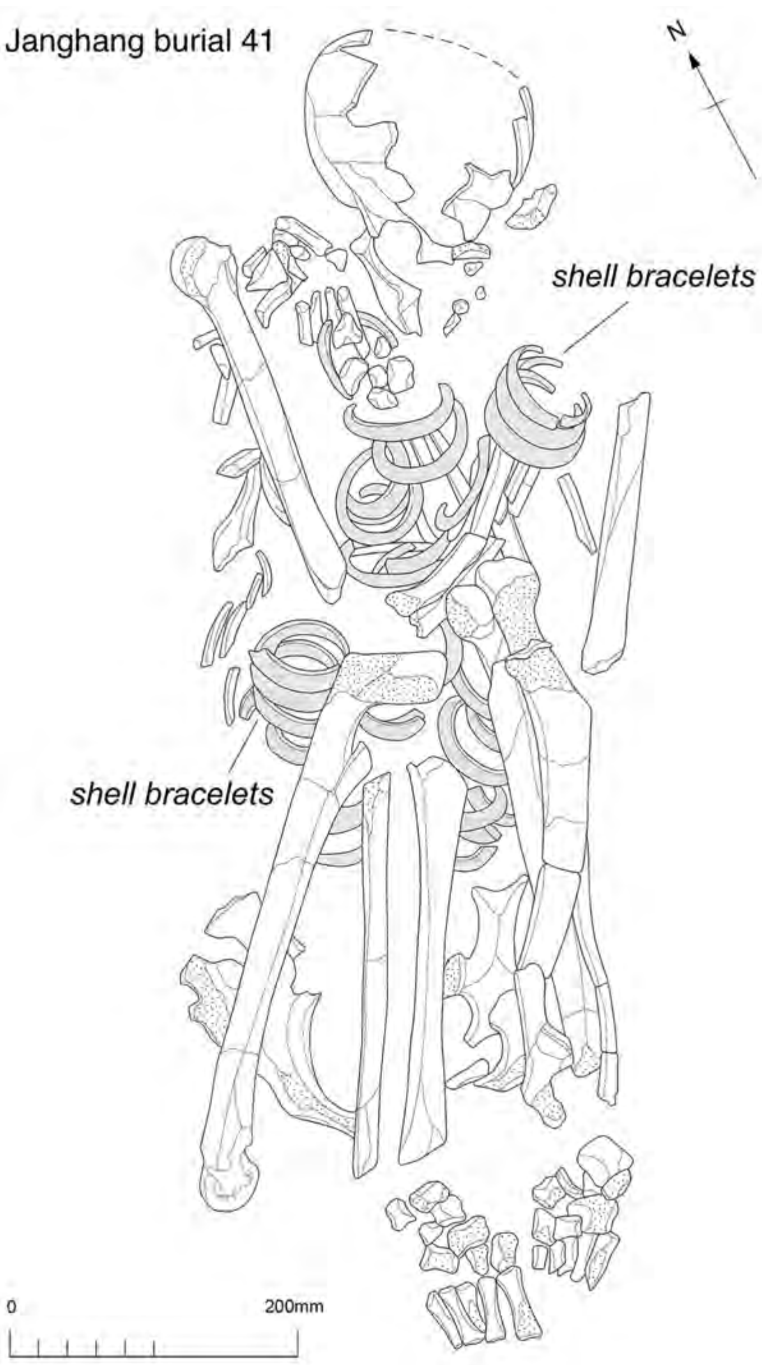


Figure 5.3.4 Shell bracelets and their mortuary contexts: (a) Selection of shell bracelets and other ornaments found at Yamaga site (adapted from Yamaga Shell Midden Research Group 1972: 65); (b) the multiple burial at Yamaga site, Fukuoka (adapted from Yamaga Shell Midden Research Group 1972: 58) and (c) burial 41 at Janghang (adapted from Bokcheon Museum 2011: 131)

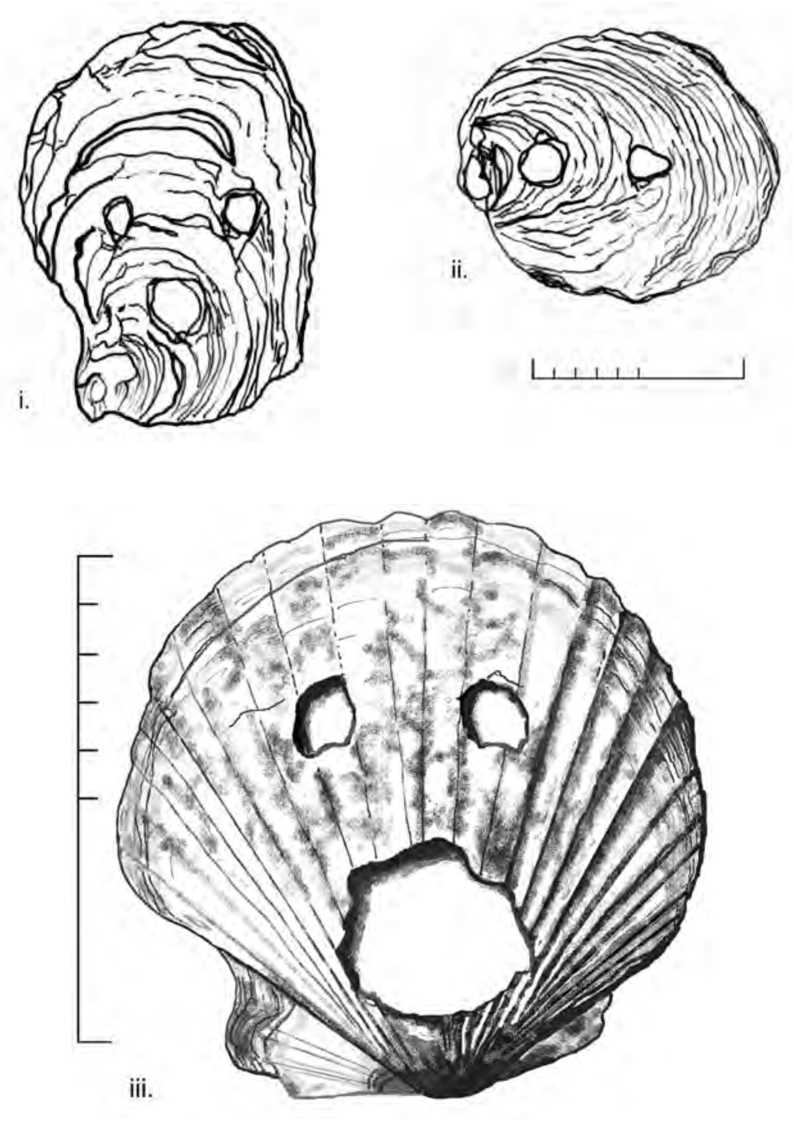


Figure 5.3.5 Shell masks. (i) Oyster-made shell masks from Adaka site and (ii) Kurobashi site, Kumamoto (redrawn from illustrations in KJRA 2005: 176, 179); (iii) scallop shell mask from Tongsamdong site, Pusan (redrawn from Bokcheon Museum 2011: 123)

Additionally, the four criteria to measure the social nature of connections, as proposed by Knappett (this volume) will be employed to evaluate the extent of: (a) continued activity over time ('frequency'); (b) the commitment to interaction by meeting at distant locales ('strength'); (c) multiple evidence of exchange: goods, knowledge, people ('content'); (d) and reciprocity in the interactions ('directionality'). Following an overview of the distinctive character of the Japanese Jomon and Korean Neolithic Chulmun cultures, we will evaluate the diachronic relation between the two cultures of northwest Kyushu and the southeastern Korean coast (including their interaction at the Korea Strait islands, particularly Tsushima) between 5000 and 1000 cal. BCE.

General characteristics of the Jomon and the Chulmun cultures

Recent studies have focused on the greater East Asian maritime interaction sphere (particularly featuring Japan, Korea and the Russian Far East) during the Late Pleistocene and Early Holocene based on similar climatological and environmental adaptations, such as the sharing of subsistence strategies, settlement patterns and technologies (e.g Aikens *et al.* 2009; Lutaenko *et al.* 2007; Uchiyama *et al.* 2014). The development of pottery before the post-glacial period is a defining characteristic of the coastal prehistoric foraging communities in this wider region. Pottery from the Incipient phase of the *Jomon* culture in northern Japan, among the world's earliest occurrences, dates to 14,500 cal. BCE, while dates for Korean Incipient Chulmun pottery recently have been pushed back to *c*.8000 cal. BCE (Habu 2004; Keally *et al.* 2004; Jordan and Zvelebil 2010; Kuzmin 2010; Gibbs and Jordan 2013; Cho and Ko 2009; Ko 2012). Food residue analysis shows that such pottery was mostly used for cooking fish chowder (Craig *et al.* 2013). Based on the temporal changes in pottery styles, the Jomon period has been divided into six phases, and the Korean Neolithic period (henceforth referred to as 'Chulmun') into four (Table 5.3.1).

Although seasonal hunting, fishing and plant food gathering practices formed the mainstay of subsistence, the Jomon and Chulmun communities were already capable of skillfully engineering their environment: arboriculture, plant manipulation and/or cultivation existed in both the Korean Peninsula and Japanese archipelago (albeit showing great regional and temporal variation) prior to the introduction of the rice-paddy agricultural system (e.g. Matsui and Kanehara 2006; Crawford 2006; Bleed and Matsui 2010; Crawford 2011). The Korean Peninsula added cultivation of broomcorn and foxtail millet cultivation from northeast China to the subsistence strategy by the Middle Chulmun period, around 3400 cal. BCE (Crawford 2006; Crawford and Lee 2003; Lee 2011, this volume). Moreover, under the influence of the northeast Chinese region, transformative developments such as the transition to full-scale agricultural and Bronze Age system (known as the Mumun period) occurred much earlier on the Peninsula.

Overall, there is a strong perception of Jomon in particular as 'affluent' or 'complex' foragers, although there is little to no evidence for *social* complexity (e.g. Koyama and Thomas 1979;

Table 5.3.1 Comparative periodization and terminology (after Fujio 2004; Underhill and Habu 2006: 135; Barnes 2015)

JAPAN		*KOREA*	
Palaeolithic		*Palaeolithic*	
Incipient Jomon	14500–9100 cal. BCE	Incipient Chulmun	8000–5000 cal. BCE
Initial	9100–5000	Early	5000–3500
Early	5000–3700	Middle	3500–2000
Middle	3700–2600	Late	2000–1300
Late	2600–1300	Mumun	1300–0
Final (Kyushu)	1300–900		
Yayoi	900–250 CE		
(East Japan:	400–250 CE)		

Habu 2004; Underhill and Habu 2006; Pearson 2007; Barnes 2015). This perception is based on a highly efficient exploitation of broad-spectrum subsistence strategies; relatively high population densities (estimated by Koyama 1978 as a total population of 260,000 during the peak Middle Jomon period); extensive networks within the archipelago, and particularly the diversity, quality and quantity of material culture, which included a wide variety of ceramics; stone and clay ritual objects such as clay figurines; stone, clay and shell or bone ornaments, and plant-based fabrics. During the Early Jomon, manufacturing techniques for lacquerware (possibly the earliest in the world) and ornaments made of amber and jadeite developed locally within the archipelago (e.g. Habu 2004; Kobayashi 2004; Pearson 2007; Kaner 2009; Bausch 2004, 2010a, 2010b, 2012).

Overall, contrasting with Chulmun's frequent exposure to cultural influences from neighbouring regions, the Jomon is remarkably self-contained. Despite (or perhaps because of) its successful longevity there is a strange paradox: there is very little evidence for regularly sustained mainland contacts. One rare early example of long-distance homogenization across East Asia reaching the archipelago are *jue* slit stone earrings, inspired by the oldest jades in the world from the early Neolithic north-eastern mainland Xinglongwa culture (in present-day Liaoning, China). Between 6000 and 5000 BCE these earring types diffused over much of coastal East Asia, including the *Hemudu* culture in the Yangze River Delta, Chulmun communities living on the east and south coast of the Korean Peninsula, the *Rudninskaya* Neolithic culture of the Russian Far East, and entering Initial Jomon Japan at least at three points — Kyushu, Hokkaido and the Japan Sea Coast, from where they were locally copied and adapted (Shelach 2000; Yang *et al.* 2007; Li 2009; Fujita 1992, 2004; Kawasaki 1998; Nakayama 2009). However, the exact routes and network dynamics are still unclear, due to stylistic differences and lack of associated artefacts and practices, and proper sourcing (e.g. Fujita 2004; Otsubo 2013). So far, there is no evidence for other artefact types with a continental origin that were adopted by the Jomon peoples with such gusto on such a wide scale: local adaptations of the slit earrings were in use throughout the archipelago until well into the Middle Jomon phase.

In contrast, long-distance networks *within* the Japanese archipelago functioned very well throughout the period, as is attested, for example, by the wide distribution of sourceable materials such as obsidian and jadeite (e.g. Suzuki 1974; Habu 2004; Bausch 2004; 2005; 2010a). From the Middle Jomon onward, jadeite ornaments from the Itoigawa Japan Sea Coast source area spread through East Japan, and by the Final Jomon circulated throughout the entire archipelago, from Hokkaido to Okinawa (KJRA 2005; Pearson 2001). Interestingly, Jomon jadeites are conspicuously absent on the Korean Peninsula (or elsewhere on the continent); conversely, tubular *Chulmun* nephrite pendants have not emerged in Jomon contexts, either (KJRA 2005; Martin Bale, personal communication 4 May 2015).

It must be noted that there is a significant degree of regional differentiation both within Japan and Korea, partially caused by dividing geographical features such as mountains, rivers, lakes and inner seas, which would create a multitude of different landscapes and micro-environments through time and which would inevitably influence lifestyle choices for local communities. Consequently, considerable inter-regional variation is evident in pottery styles and other material culture, resource use, population density, settlement systems, mortuary and other ritual practices, depending on the strength of the existing inter-regional interaction networks at any given time (e.g. Imamura 1996; Kobayashi 2004; Habu 2004; Pearson 2006; Underhill and Habu 2006; Nelson 1993; Choe and Bale 2002; Norton 2007; Shin *et al.* 2012; Barnes 2015). For example, *Tongsamdong* at the southeastern coast of Korea and Sobata in northwest Kyushu are very different from, say, western Korean *Amsadong* culture, and northern Jomon Sannai-Maruyama (the best-known example from the Early-Middle *Jomon*), in terms of subsistence exploitation, settlement pattern, ceramic and material culture, and ritual and mortuary practices, respectively.

Western Japanese Jomon culture in Kyushu is generally perceived as eastern Japan Jomon's poorer cousin, in terms of its environment, the less productive broadleaf evergreen forest-system resources (e.g Akazawa 1986); its much lower site and population density (e.g. Koyama 1978; Imamura 1996); and its relatively demure material culture and scarcity of ceremonial objects.

Settlement pattern developments differ significantly between eastern and western Jomon Japan. In eastern Japan, population densities increase sharply from the Early Jomon onwards, culminating in a peak during the Middle Jomon (Imamura 1996). Large-scale settlement sites emerged, which frequently show continuity in use over a longer period. Typically, large numbers of pit dwellings are arranged around a central plaza featuring storage pits, burials, with additional longhouses and ritual structures optional, such as at Sannai-Maruyama in northern Japan; at coastal sites, large-scale shell middens are located at the outskirts of the village. Material culture is amply represented both in quantity and quality – pottery, ritual objects, personal ornaments including jadeites and amber obtained through long-distance exchange. However, during the second half of the Late Jomon and the Final Jomon, the settlement pattern in eastern Japan changes into a dispersed pattern: although discoveries of cemeteries, ritual sites and material culture are abundant, there is very little evidence for nearby permanent dwellings, implying more residential mobility. A sharp decrease in the use of shell middens in eastern Japanese coastal areas further suggests a subsistence focus shift towards hunting and exploiting terrestrial resources (e.g. Habu 2004, 2008; Kobayashi 2004; Pearson 2007; Uchiyama 2008).

In northwest Kyushu, the settlement pattern is almost the reverse. Until the middle phase of the Late Jomon the settlements in northwest Kyushu were small-scale, typically consisting of large-scale shell middens near the coastline, and large numbers of waterlogged storage pits for acorns in nearby lowland sites. While burials (accompanied by many well-crafted organic artefacts including ornaments made of shell and bone) have been preserved at the shell middens, house remains are ephemeral; dwelling pits and ritual structures are usually absent (Mizunoe 1998; Imamura 1996; Kizaki 2004). However, from the second part of the Late Jomon onwards, the patterns change: population numbers and sedentism in Kyushu increase, leading to an exponential growth in number and size of sites and dwelling pits. Large-scale horseshoe-shaped settlements (similar to those in eastern Japan, prior to the second half of the Late Jomon) emerge, with many dwelling pits located around a central open space (Mizunoe 1998).

Across the Korea Strait, a similar site pattern is visible on the southern coast of Korea. Until the end of the Chulmun period, sites such as Tongsamdong also largely consist of shell middens, frequently accompanied by burials, but feature relatively few dwellings even during periods of socioeconomic intensification – especially compared to the larger-scale Middle Chulmun settlements, such as Amsadong, in the western or central regions (Nelson 1993; Shin *et al.* 2012).

Paradoxically, Incipient and Initial Jomon period culture in the remote Kagoshima prefecture of southwestern Kyushu flourished exceedingly early (between *c.*11,500 cal. BCE and 5300 cal. BCE), due to its location in a warmer climatic zone. Japan's earliest (semi-) sedentary villages, such as Uenohara, featured ritual structures and a unique material culture, including beautifully shaped ceramics, clay figurines, ornaments and polished stone tools (e.g. Pearson 2006, 2007; Barnes 2015). Unfortunately this development was cut short by the mega-eruption of the Kikai Caldera in 5300 cal. BCE, which laid down the thick Kikai-Akahoya tephra layer that conveniently distinguishes Initial from Early Jomon assemblages in Kyushu, and is deposited all the way to southern Korea and the southern part of East Honshu (Machida and Sugiyama 2002). Opinions about the extent of the cultural discontinuity and change caused by this disaster vary widely. Worst-case scenarios depict the entire depopulation of Kyushu for about 900 years, followed by the influx of immigrants introducing a new culture (ibid.; Grattan 2006). However, recent analysis of pottery style developments before and after the disaster, observed stylistic continuity from Initial to Early

Jomon, indicating much greater resilience and faster recovery, at least in northwestern Kyushu (Kuwahata 2002, 2008; Hall 2006). Then, a few hundred years into the Early Jomon phase, communities associated with the *Sobata* pottery style increased their marine exploitation activities, expanding their networks all the way to Okinawa, kick-starting the interaction processes across the Korea Strait that would continue on and off during the remainder of the Jomon.

The following section analyses the archaeologically visible development and extent of northwest Kyushu interaction with the southeastern Korean peninsular Chulmun communities through time, in order to assess whether aspects of long-distance interaction had any lasting impact on subsistence and/or social systems. Archaeologically visible indications of interaction include pottery influences and exchanges, fishing tools and technologies, exchange of highly valued commodities (obsidian; ornaments); changes in subsistence systems, settlement patterns; influences on socio-religious (including mortuary) practices and iconography.

To expose the general trends underlying the fluctuating relations over time, I have created a loose division into six stages, from the Pre-contact Initial Jomon phase to the Jomon-Yayoi transition phase. The focus area in question covers (1) the coastal area of the modern prefectures Kumamoto, Nagasaki; Saga and Fukuoka, facing the Ariake Inner Sea, and Genkai Sea coast respectively; (2) 'stepping stone' islands in the Korean Strait, notably Tsushima, Iki and the Goto Islands; and (3) contemporaneous southeastern peninsular shell midden sites in the South Kyongsang region (Figure 5.3.2).

Case study: a diachronic overview of interaction

Phase 1. End of Initial Jomon: prior to the Kikai-Akahoya eruption of 5300 cal. BCE

This period is characterized by climatic warming and sea-level rise, followed by increasing exploitation of lagoon environment and plant resources. Although contemporaneous to Uenohara in southwest Kyushu, the large-scale Higashimyo (Saga prefecture) has a distinct northwest Kyushu material culture and settlement type, lacking specific ritual structures or objects. The site consists of multiple shell middens; the faunal and floral data show that the occupants hunted terrestrial game, exploited tideland fish and shellfish, and collected seasonal plant foods. Moreover, large numbers of wetland storage pits with soaked (but still well-preserved) edible broadleaf evergreen acorns attest to long-term storage skills (Imamura 1996; Bunkacho 2007, 2014). Typically for the Kyushu settlement type, permanent pit dwellings are absent, but there are burials with personal ornaments made of delicately decorated shell and antler, and terrestrial and marine animal bones. Subtly patterned woven reed baskets and wooden artefacts further indicate the high level of local craftwork. While the earliest example of Jomon pottery found on Tsushima Island (Furusawa 2014) suggests that inhabitants of northwest Kyushu were aware of the existence of Tsushima's location and visited at least once, there is no conclusive evidence of direct interaction with Chulmun populations across the Korea Strait, such as influences visible in pottery or tool types, as yet (Bunkacho 2007, 2014).

Phase 2. Early Jomon: start of open-sea fishing and interaction with groups from the southern Korean coast (c.5000–3700 cal. BCE)

Sites are characterized by post-Kikai-Akahoya eruption Todoroki B and Sobata pottery styles. During this period, the climatic optimum was in full swing; temperature was up to two degrees warmer than today, and the sea level rose to its maximum. The necessary water transport technology was already in place: a 6.5 m long dugout canoe was found at Ikiriki, in Nagasaki (Shimazu 1992). Across the Korea Strait, two wooden dugout canoes were found at Bibong-ri, in Gyeongsang Nam-do, AMS radiocarbon dated to about 5700 BCE (Gimhae National Museum 2008; Park *et al*. 2010).

This is the period of deep-sea exploration across the Korea Strait, leading to connectivity between the Jomon and Chulmun fishing communities. However, not all Early Jomon communities participated equally in these activities. Faunal evidence from tidal flat shell middens along the Ariake Inland Sea, such as Todoroki and Sobata in Kumamoto, shows subsistence exploitation of nearby riverine and lagoon and tidal flat shellfish and fish. Hunters demonstrate a preference for large game such as sika deer and wild boar, although smaller mammals are also hunted. Plant foods continue to be extremely important in the diet; large numbers of wetland storage pits contain edible broadleaf evergreen acorn species (Kizaki 2004). Their settlement pattern is largely similar to the previous pre-Kikai Initial Jomon sites, and there is not much direct evidence of overseas contact at the sites facing the Ariake Inland Sea tidal flats.

It is the mostly fishermen from the northern Genkai coast who initiate exploration of the Korea Straits, engaging in contact with members of Chulmun communities along the way. There is a flow of information, goods and probably people. Chulmun open-sea fishing technology is transmitted; large 'Osanri'-type composite fishing hooks used by the Chulmun appear in Early Jomon shell midden contexts such as Yamaga in Fukuoka, and Nabatake in the Saga prefecture (Komoto 1999). Moreover, the widely-acknowledged Chulmun stylistic influence on Early Jomon style pottery development indicates mobility and/or intermarriage: direct contact between potters (Miyamoto 1990; Kim 1986; Nelson 1993; Im 1995). In return, Chulmun communities receive high-quality obsidian from the Koshidake source in Kyushu; such obsidian imports are found at Tongsamdong shell midden (Sample 1974). The Straits Islands function as primary locales for intercultural interaction: Early Jomon and Early Chulmun period pottery co-exists at Tsushima Island sites such as Koshidaka and Koshidaka-Ozaki, which also yield abundant obsidian flakes and arrowheads (Miyamoto 2008; Furusawa 2013; 2014). Moreover, small amounts of pottery at sites such as Tongsamdong show that coastal sites were also involved in connectivity.

Early Jomon Genkai coast fishermen apparently regarded the sea-level increase as a 'highway' instead of a barrier, exploring widely and connecting with distant communities. They also travelled in a southern direction, as evidenced by the influence of their Sobata-style pottery on the independent Jomon pottery-style culture in the Okinawan/Ryukyu island chain (Pearson 2001); at its widest, this style influence extended 950 km from end to end (Shimazu 1992). Japanese archaeologists portray these fisher-trader-explorers as outward-looking, intrepid pioneers, especially compared to their contemporaries along the Ariake Inner Sea exploiting the tidelands (e.g. Dogome 2008; Kizaki 2004).

Phase 3. Middle Jomon: decrease in interactive practices across the Strait, 3700–2600 cal. BCE

There is no change in the 'dispersed,' small-scale settlement pattern, or mortuary practices in northwest Kyushu. The climate starts to cool slightly, and small adjustments are made in the exploitation of shellfish in response. At Yamaga, changes in Middle Jomon toolkit (increase in fish net sinkers and arrowheads) and faunal remains indicate a subsistence shift towards terrestrial and inner sea resources (Yamaga Shell Midden Research Group 1972). Imprints of vertebrae on the bottom of Adaka pottery suggest the exploitation of (beached) whales (Shimazu 1992).

The Jomon plant-based evergreen broadleaf nuts subsistence strategy remains unchanged (Crawford 2006; Obata 2011) – in sharp contrast to the Peninsular south coast, where foxtail millet and broomcorn millet were found on a dwelling floor at Tongsamdong, dated 3360 cal. BCE (Crawford and Lee 2003; Lee 2011). Dry-field millet cultivation had been introduced into the Peninsula via the northeast China region during the Middle Chulmun, accompanied by tools such as hoes, ploughs and sickles made of bone and stone, and spreading all the way to the southern coast (Shin *et al.* 2012).

Social developments also diverge: Janghang cemetery, a large-scale Middle Chulmun site with 48 burials, features several rare tubular nephrite pendants, shell bracelets, and ornamented bone objects and shark teeth, 'showing an aspect of a hierarchical structure' (Kim 2011: 22) which, even in this incipient form, is still absent from north Kyushu Jomon sites. Another difference is iconography. A small number of pictorial engravings on Chulmun pottery have been found: for instance, an image of a wild boar carved into Middle Chulmun pottery found at Bibong-ri (Gimhae National Museum 2008), and a similar representation of a deer carved into pottery at Tongsamdong (Dongsam-dong Shell Midden Museum 2008). A pot with a 'crude' image of a spouting whale was reported at Sugari shell mound (Nelson 1993). Recently some re-interpretations of the famous Pan'gudai rock art in Ullsan have attributed these as pre-Bronze Age, relating the images to Neolithic whaling practices instead (Shin *et al.* 2012). Traditionally, this kind of iconography in Korean archaeology has been interpreted as hunting-related shamanistic practices. These representations are absent among the Jomon.

There is some evidence for continued interaction across the Strait, but the consensus is that it has somewhat declined. At Tsushima, pottery from both regions is represented, and Meotoishi produces obsidian arrowheads, cores and flakes (Furusawa 2013, 2014). Obsidian and small quantities of Kyushu pottery are distributed at Peninsular shell mounds such as Tongsamdong and Janghang in Pusan (Sample 1974; Kim 2011), while a Korean type fish hook is found at Yamaga shell midden in Fukuoka (Komoto 1999). Shifts in subsistence focus may at least partially account for the decline in direct interaction across the Korea Strait.

Phase 4. Final phase Middle Jomon – early phase Late Jomon: maximum exchange and interaction (approximately 2600–2000 cal. BCE)

Evidence for millet or other cultivation is still absent in northwest Kyushu, and there are no changes in settlement pattern. However, several other changes are indicative of expanding networks and renewed connectivity across the Korea Strait.

In terms of protein-based subsistence, this period sees an intensification of open-sea resource strategies targeting large-sized fish and sea mammals, resulting in the formation of northwest Kyushu's largest-scale shell middens. Faunal and tool assemblages at sites show an increase in shared fishing technology across the Korea Strait (Figure 5.3.3), exploiting open-sea fish such as amberjacks, tuna and sharks (Komoto 1999). Primary examples are Yamaga shell midden in northwest Kyushu (Yamaga Shell Midden Research Group 1972) and Tongsamdong (Sample 1974; Shin *et al.* 2012). Innovations for hunting large sea mammals and sharks have been added to the tool repertoire: composite saw-shaped microlith harpoons and detachable obsidian spear heads, respectively, which are also used in the Amur and Baikal regions (Watanabe 1985, 1988; Kizaki 2004; Shimazu 1992). Localized tool variations of pre-existing composite fishing hooks are exchanged: the 'northwest Kyushu' antler-and-tusk composite hook type is found at Sangnodaedo, and conversely, a Chulmun composite fish hook (stone-shank-bone-hook) type at an Ariake Inner Sea site in Kumamoto (Imamura 1996; Im 1995; Shimazu 1992; Kizaki 2004).

Intensified subsistence and trade interaction is also evident in the Jomon trade settlements on Tsushima. The Middle–Late Jomon settlement of Saga shell midden shows more permanent occupation, with three house pits and various burials with personal ornaments. Sites show evidence both of deep-sea fishing tool kits, and trade goods, such as shell bracelets, obsidian and specialized adze production. The presence of a Chulmun style pot in a house may indicate intermarriage (Furusawa 2014).

In Kyushu, a societal change is visible in early Late Jomon mortuary practices: an increase in multiple burials, and greater variation and differentiation in burial goods, especially involving multiple *Glycymeris albilineata* clam shell bracelets, which are almost exclusively associated with women. Female burials with multiple shell bracelets are also found across the Korea Strait. At the Late Jomon cemetery of Yamaga shell midden in Fukuoka, seven out of the eighteen burials contained multiple bracelets; the best-known example consists of a multiple burial with two women and an infant, whereby both women wore multiple shell bracelets and various other ‘prestige objects,’ such as shark teeth, a greenstone pendant and antler hip ornament (Yamaga Shell Midden Research Association 1972; KJRA 2005). Very delicate and narrow, these shell bracelets would be almost impossible to remove, and are often believed to have been donned in childhood, precluding work activities afterwards. As such, they are frequently interpreted as markers of specialized occupation (e.g. ritual specialist) and (incipient) social differentiation (Kobayashi 2004; Watanabe H. 1990; Habu 2004). Tanihata (2015) proposes a possible continental descent for these two ladies, based on burial style, personal attributes indicating social identity, and physical characteristics (facial features; lack of tooth modification), but stresses the need for DNA analysis.

Across the Strait, similar burials of women wearing multiple clamshell bracelets and several special ornaments including nephrite are found in Middle–Late Chulmun mortuary contexts such as at Ando and Janghang (Bokcheon Museum 2011; Kim 2011; Figure 5.3.4c). Intermarriage or mobility is one possible explanation for this change in mortuary contexts in north-west Kyushu. How widespread did this custom become? Did Jomon women deliberately emulate this Chulmun custom of wearing multiple bracelets during this phase? If so, did it carry the same kind of social value? What kind of impact did this have on identity and social dynamics? And to what extent does this indicate a standardized practice, a *shared* value or sense of identity? The actual concept of shell bracelets for personal decoration was not new to the Jomon, since it already existed since the Initial Jomon at Higashimyo, but it is possible that at least some of these early Late Jomon bracelets were indeed derived from Chulmun sources. Manufacturing of shell bracelets took place at Tongsamdong shell midden and nearly Beombang site, 10 km away (Kimura 1992; Kim 2011). At Tongsamdong, shell bracelets – both finished and in various stages of completion – comprised the second-largest artefact category (Sample 1974). Some postulate that these shell bracelets were produced for exchange against Kyushu obsidian (Ha 2006, cited in Shin *et al.* 2012). Comparative research on Late Jomon mortuary practices, bracelet style and manufacturing in both Korea and Japan is needed to further investigate these dynamics.

Other examples of artefacts potentially indicating shared social and spiritual values are those with iconographic similarity. The ‘ceremonial shell masks’ (Figure 5.3.5) from Adaka and Kurobashi in the tidal flats of the Ariake Inner Sea are supposed to have emulated the famed shell mask at Tongsamdong, which was interpreted by Korean archaeology doyenne Kim Won-Yong as a ‘ceremonial object’ (Kim 1986: 54; Shimazu 1992). However, this is hardly conclusive. Temporal contexts are unclear, and closer inspection does not support standardization: while all Kyushu examples are made of oyster, the Tongsamdong one is made of scallop, and actually looks quite different. Morever, Adaka and Kurobashi shell middens are located along the Ariake Inner Sea, sites with a less strong open-sea subsistence strategy and that show little other evidence of interregional contacts (Kumamoto Board of Education 1998). The small, crude wild boar clay figurines, interpreted as a 'fertility symbol', found at Jomon sites on Tsushima and Goto Island, and at Yokjido on the Korean south coast are perhaps more plausible indicators of shared values; all three sites yielded multiple evidence of both shared fishing practices and inter-regional trade, such as obsidian and non-local pottery (e.g. Kimura 1992; Shimazu 1992; Furusawa 2014). While this does support the possibility of standardized ritual practices among these communities, again it remains unclear whether the objects are contemporaneous, and how widespread this practice actually was.

Phase 5. Second half of Late Jomon: network focus shift towards eastern Japan (c.2000–1300 cal. BCE)

This phase sees a large focus shift towards interaction with eastern Japan (Matsumoto 2005), at the expense of the Korean Strait interaction. There is a radical change in settlement pattern: the all-inclusive, large-scale sedentary horse-shoe-shaped settlement with permanent pit dwellings surrounding burials and ritual features is suddenly adopted from eastern Japan, such as at Ishinomoto and Kaminabe in Kumamoto; meanwhile shell middens decrease rapidly in size, indicating a subsistence shift towards terrestrial sources. Material culture changes drastically; the local Kyushu pottery style adopts the 'erased cord-marked' pattern from eastern Japan (Matsumoto 2005). Moreover, personal decoration preferences shift from organic ornaments towards stone pendants, including imported Japanese jadeite from the Itoigawa central Japan sea coast (Otsubo 2005). Another change related to personal appearance is the (limited) increase of individuals undergoing tooth modification practices, interpreted as rites of passage and markers of social identity; a custom never practiced by the Chulmun (Harunari 1986; Temple *et al.* 2011; Tanihata 2015). East Jomon ceremonial artefacts are adopted: clay figurines (albeit with a local twist according to Matsumoto 2005: 158–63), stone phallic rods and spouted ceremonial pottery.

The Straits islands and long-term exchange partner Tongsamdong also reflect the breakdown of Jomon–Chulmun exchange relations. Furusawa (2014: 43) observes that while mutual trading posts had been intensively used from Initial until early Late Jomon, from mid–Late Jomon onwards, Tsushima sites are still used by Jomon fishermen, but Chulmun pottery is absent. In Korea, this was also the last period that any Late Jomon pottery was found at Tongsamdong, and only in tiny quantities (Furusawa 2013).

This decline of this type of direct person-to-person exchange between the Chulmun and Jomon communities appears to coincide with the changing subsistence focus at Tongsamdong, which shows a sharp increase in the pursuit of terrestrial game and millet cultivation, at the expense of open-sea fishing activities. Nevertheless, the new millet cultivation is generally considered as merely complementary to existing Chulmun subsistence strategies, and appears to have had limited to no impact on social structure (Lee 2011; Crawford and Lee 2003). Faunal assemblages in Kyushu also indicate a greater focus on terrestrial resources. If the main agents in the interactive practices indeed were specialized fishermen, and considering the effort and risk required to physically travel to the Straits Islands (Miyamoto 1990), lack of incentive for continued subsistence-based cooperation may explain the end of the Chulmun–Jomon interaction, and their respective refocusing on northeast Chinese and east Japanese cultural influences, instead.

Phase 6. Final Jomon (1300–900 cal. BCE) - Incipient Yayoi (c.1000–400 cal. BCE): renewed continental interaction and introduction of agriculture

This period witnesses inter-regional connectivity on a far wider and deeper scale than before. When, by the Final Jomon period, interaction with communities across the Korea Strait increases again, this time it involves *Mumun* agriculturalists that now inhabit the Korean Peninsula. During the Mumun period, the Korean Peninsula was again strongly influenced by innovations, practices and material culture from the Liaoning region in northeast China, which eventually trickled down to the southern coastal area, and eventually into the archipelago. Irrefutable evidence of wet rice cultivation (in the form of carbonized rice; remains of irrigated paddy fields; tools such as stone harvesting knives) can be found *c.*700–400 BCE in southwest Korea during Middle Mumun settlements such as Songguk-ni, together with a range of other cereals including millets, barley, wheat and beans (Rhee *et al.* 2007; Ahn 2010; Lee 2011).

Changes in Kyushu pottery style already reflect the intensified contacts (Matsumoto 1996, cited in Habu 2004: 208). Shared fishing technology practices are continued during this period (Komoto 1999; Watanabe 1988), but now there is also unequivocal evidence of Mumun groups migrating into northwest Kyushu. The newcomers introduce new cereal crops: rice, barley, wheat, millet, together with a new material culture complex (such as red burnished pottery; stone and bronze 'Liaoning' daggers) and technology (spindle whorls and loom technology; eventually: metallurgy). Foraging subsistence is combined with paddy agriculture. With a rapidly increasing population (probably swelled both by Mumun newcomers and the security of an additional subsistence strategy that can feed more Jomon mouths), stable, large-scale settlements with many permanent dwellings emerge again, starting in northwest Kyushu.

At Nabatake, indigenous Final Jomon pottery is associated with irrigated paddy fields. The tool assemblage combines the standard Jomon assortment, with continental implements: wooden agricultural tools such as a rake, triangular stone harvesting knives, grooved polished adzes, stemmed polished arrowheads and polished stone daggers with hilts. Stone ornaments include Jomon as well as Mumun types (Sahara 1986). Excavations at Magarita uncovered large quantities of carbonized rice. The settlement includes 33 square pit dwellings as well as a Mumun-type dolmen with a child burial. The material culture featured a similar hybrid tool and ornament assortment (still dominated by Jomon styles), plus spindle whorls and a few Korean Peninsular-style handled cooking pots. Sahara (1986) emphasizes the significance of the fact that all these new aspects were embedded in Kyushu society (as well as on Tsushima and Iki islands), co-existing with Jomon culture, well before the new 'Yayoi' Itazuke I pottery style, first discovered at Itazuke came into being.

Research into the Jomon–Yayoi transition is heavily complicated by widespread disagreement over dating methods and how to define 'Yayoi.' Mizoguchi (2013), adhering to the 'Incipient Yayoi starting at 900 BCE' school of thought, has proposed that the transition period coincided with a cold spell that potentially negatively affected plant food resource availability – a factor that may have contributed to the receptivity of the Jomon to the new lifestyle package. For a while, Jomon and Mumun customs co-existed, including new mortuary practices such as dolmen and cist burials, and settlement patterns based on the Mumun agricultural Songguk-ni settlement site. Eventually the Jomon language and socio-ritual practices were replaced. Current discourse favours the interpretation of peaceful co-existence and transition (e.g. Matsumoto *et al.* 2011; Mizoguchi 2013; Barnes 2015).

Discussion: early globalization in the Korea Strait interaction sphere?

Table 5.3.2 summarizes the fluctuating nature of the connections based on Knappett's criteria. Looking at fluctuations in *frequency* and *strength* of connections through time, it becomes very clear to what extent the overall interactions within this spatio-temporal context were driven by shared subsistence-based practices, frequently influenced by changes in climate and environment. During optimal climatic conditions, connections between Jomon and Chulmun intensified. During colder spells, when open-sea fishing became less attractive (crossing the Korea Strait is not entirely without risk, as Kublai Khan's invasion fleet discovered in the thirteenth century), interaction decreased. Instead, the foragers turned to different modes of subsistence, and/or to other long-distance networks as can be seen in phase 5. In this light it is particularly intriguing that the Jomon made no attempt to adopt the Chulmun innovation of millet cultivation – perhaps because this new practice did not seem to bring about any fundamental social changes within Chulmun society itself, and thus no visible benefits.

Directionality was reciprocal, although current evidence suggests that the flow of people and ideas came more from the Chulmun side. Perhaps this is due to a data bias, as the majority of data presented here was derived from the Japanese side. The strong focus on subsistence can also be seen in the *content*, in terms of exchanged goods and shared practices. As for the flow of people and social identities, clearly there was some extent of mobility and intermarriage. However, agency is shown in the extent of transmission of social and ritual practices – which are very few and far between. Both Chulmun and Jomon groups generally maintained their characteristic social identity (with the possible, partial exception of the pottery influence in phase 2, and shared social values related to shell bracelets in phase 4, which should be further explored). There is no creation of new, hybrid types of pottery. Moreover, many other practices were not adopted across the Strait: notably Chulmun millet cultivation, Jomon rite-of-passage ceremonies involving dental modification and non-shell ornaments.

In summary, long-term interaction among Jomon and Chulmun did *not* lead to a lasting impact on social, cognitive or subsistence systems, and thus it cannot be classified as 'complex connectivity'. Recently, several scholars have come to reject the hypothesis that the Chulmun–Jomon fishermen interaction practices ultimately facilitated the Jomon–Yayoi transition (e.g. Furusawa 2014; Nakao 2013). As Nelson (1993: 7) concluded, 'Evidence suggests intermittent rather than continuous contacts. Although boats were efficiently used, each region seems to have been basically self-sufficient, with little need to interact.'

Why was there little to no transmission of social or cognitive aspects that would have inspired less superficial interactions? One possible explanation is that the Chulmun and Jomon spoke different languages, preventing communication on a more cognitive level (Furusawa 2013; Tatsuo Kobayashi, personal communication June 2015). This is perhaps also apparent in the dynamics of the northwest Kyushu network shift towards east Japan during phase 5. Though relatively brief, this interaction generated more cultural changes than all Jomon–Chulmun interactions: the emulation of settlement patterns, material culture styles and ritual objects underlines its impact on subsistence, social identity and worldview.

However, ethnographic evidence indicates that language differences do not necessarily form an impediment in more basic-level knowledge transmission related to subsistence, trading and technology. Non-verbal communication of skills and information is possible. Moreover, since craftspeople learn the basics of their craft at an early age, they can quickly pick up innovative design modifications, based on observation and visual inspection (e.g Gosselain 2008, 2010; John Terrell, personal communation 2012; Sahoko Aki, personal communication 2015).

Table 5.3.2 Characteristics of interaction between Northwest Kyushu and Southeast Korea through time

Phase	*'Frequency'*	*'Strength'*	*'Content'*	*'Directionality'*
1	n.a.	n.a.	n.a.	n.a.
2	Increasing	Increasing	Goods: fish hooks, obsidian Ideas: specialized deep-sea fishing knowledge; pottery styles People: some mobility and intermarriage Practices: specialized deep-sea fishing; trading	Jomon < > Chulmun (Flow of ideas and people coming from Chulmun direction archaeologically more visible)
3	Declining	Declining	Goods: fish hooks; obsidian Practices: deep-sea fishing; trading	Jomon < > Chulmun
4	Increasing	Increasing	Goods: obsidian; variety of fishing tools; shell bracelets Ideas: some socio-ritual ideas (bracelets; ritual fetishes (?); specialized deep-sea fishing knowledge People: some mobility and intermarriage Practices: fishing; trading	Jomon < > Chulmun (Flow of ideas and people coming from Chulmun direction archaeologically more visible)
5	Declining strongly	Declining strongly Increasing strongly	Goods: (obsidian; tools) Practices: (deep-sea fishing; trading)	Jomon < > Chulmun *Instead:* Chulmun < > Chulmun/ NE China NW Kyushu Jomon < > East Japan Jomon
6	Increasing drastically	Increasing drastically	People: Mumun migrants Goods, ideas and practices: (subsistence, social, ritual) associated with rice-paddy lifestyle complex	Jomon < < Mumun

The location of the interaction and the nature of the exchanges tells us a lot about the identity of the main agents: travelling fishermen who specialized in open-sea resources, complementing their occupational skill set with exploring, trading and tool-crafting. It is quite likely that they enjoyed considerable respect at home (e.g. Helms 1988), due to their explorations into the unknown and valuable contributions to Jomon society (in terms of protein as well as news and innovations). If cognitive ideas were shared, these more likely revolved mostly around the 'hunter-fisher' lifestyle and identity. Shared ritual practices involving deep-sea fishing may not be visible archaeologically, or it is possible that markers of shared identities expressed in, for example, ornamentation (including but not limited to shell bracelets), simply has not been sufficiently investigated yet.

On the other hand, Jomon interaction with the *Mumun* migrants, who apparently offered attractive new perspectives and benefits in terms of economy, technology and ideas, *did* lead to complex connectivity. At this point the archipelago finally started to enter the wider sphere of interactions that originated on the continent, and earlier had already involved the Korean Peninsula and northeast China. The adoption of the new subsistence and lifestyle package had an irrevocable impact on material culture, cultural identity, the subsistence system, cognitive and social structure, and engendered a new culture: the Yayoi.

Conclusions

In summary, the following observations about the underlying factors for this 'negative' example of early globalization processes can be made:

- Geographical conditions: due to its isolated location, the Japanese archipelago does not naturally engender many opportunities for long-distance interactions and exposure to outside ideas and innovations. It is no coincidence that the 'Fishermen Interaction Sphere' took place along the closest possible route to the continent, with several islands as convenient 'way stations' in between.
- Socio-political complexity, social identity and individual agency vis-à-vis cultural change: there was little to no social difference during the Jomon period, despite the complexity of subsistence scheduling and the manufacture of elaborate material culture. Within a relatively small population without ferocious socio-political competition among elites, there is less incentive for joining larger-scale network membership in order to increase individual status and power. Jomon socio-ritual practices were developed over a long period; there probably existed a strong socially embedded consciousness of kinship relations regarding personal identity and worldview.
- Size and scale of network membership versus broader societal change: the Jomon actors involved in the 'Korea Strait Fishermen Interaction Sphere' belonged to a sub-group of an already small population; they were a very specialized group, with highly specific interests.
- Internal versus external incentives for larger-scale integration: the Jomon were generally self-reliant in terms of their economical, social and ontological needs. Requirements for economically or socially valued goods could be adequately met through long-distance networks within the archipelago. On the other hand, changes in environment or climate causing a breakdown or change in the subsistence system are important catalysts for pursuing inclusion in wider-scale networks. This may have played a role in the motivation of the northwest Kyushu communities to engage in intercultural interaction, both in the Early and Final Jomon.

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5.4

Colonialism in the time of globalization

The Western Zhou Yan state revisited

Yitzchak Jaffe

Introduction

In traditional Chinese historiography, the Zhou (1046–221 BCE) were the third royal dynasty in the ancient dynastic sequence, preceded by the Shang and Xia dynasties (2100–1046 BCE). The Western Zhou (1046–771 BCE) ruled for just under 300 years, but their legacy and importance in Chinese historiography and political philosophy cannot be overstated. The Zhou are credited with greatly expanding the geographical territory of the Shang, establishing the ideal norms of social and political behaviour, and creating many aspects that we now associate with Chinese culture. Many of the archetypical Chinese political and social institutions, as well as key concepts and ideas, are understood to have originated and developed during this period. Confucius alluded more than once to the Zhou and their courtly rituals as paragons of moral conduct and virtuous leadership (e.g. *Analects* 3.14, 7.5, 9.5).

During the Eastern Zhou period (771–221 BCE), the many polities that competed for political power in the centuries following the collapse of the Western Zhou court were the product of the earlier period territorial expansion and political vision (Figure 5.4.1). Yet even as over time these polities (also referred to as states) developed their own unique material assemblages, literary traditions and political institutions, they were still unified under a larger umbrella of Zhou identity and culture (Shelach 2015). Eventually, in 221 BCE, these states were conquered by the Qin state that would go on to establish the first Chinese Empire. The Qin, however, saw themselves not as conquerors but as unifiers and the restorers of the proper order, and in their political enterprise they drew heavily upon the fact that the Zhou states shared a common origin (Pines 2002).

Thus the Western Zhou period is considered central to the genesis of Chinese civilization. The traditional narrative, focusing on the outcome of the later unified Chinese Empire, sees the Western Zhou and the many polities they set up, as the starting point for the 'Huaxia' (華夏) or greater Chinese civilization (van Falkenhausen 2006). Yet even while scholars have made great advancements in the reconstruction of the Western Zhou history, they have emphasized the achievements of the Zhou in conquest and viewed this process, primarily, as an assimilation of the local peoples into Zhou society (Hsu and Linduff 1988; Li 2006). Following van Falkenhausen (2006), this chapter calls into question the Western Zhou expansion as an

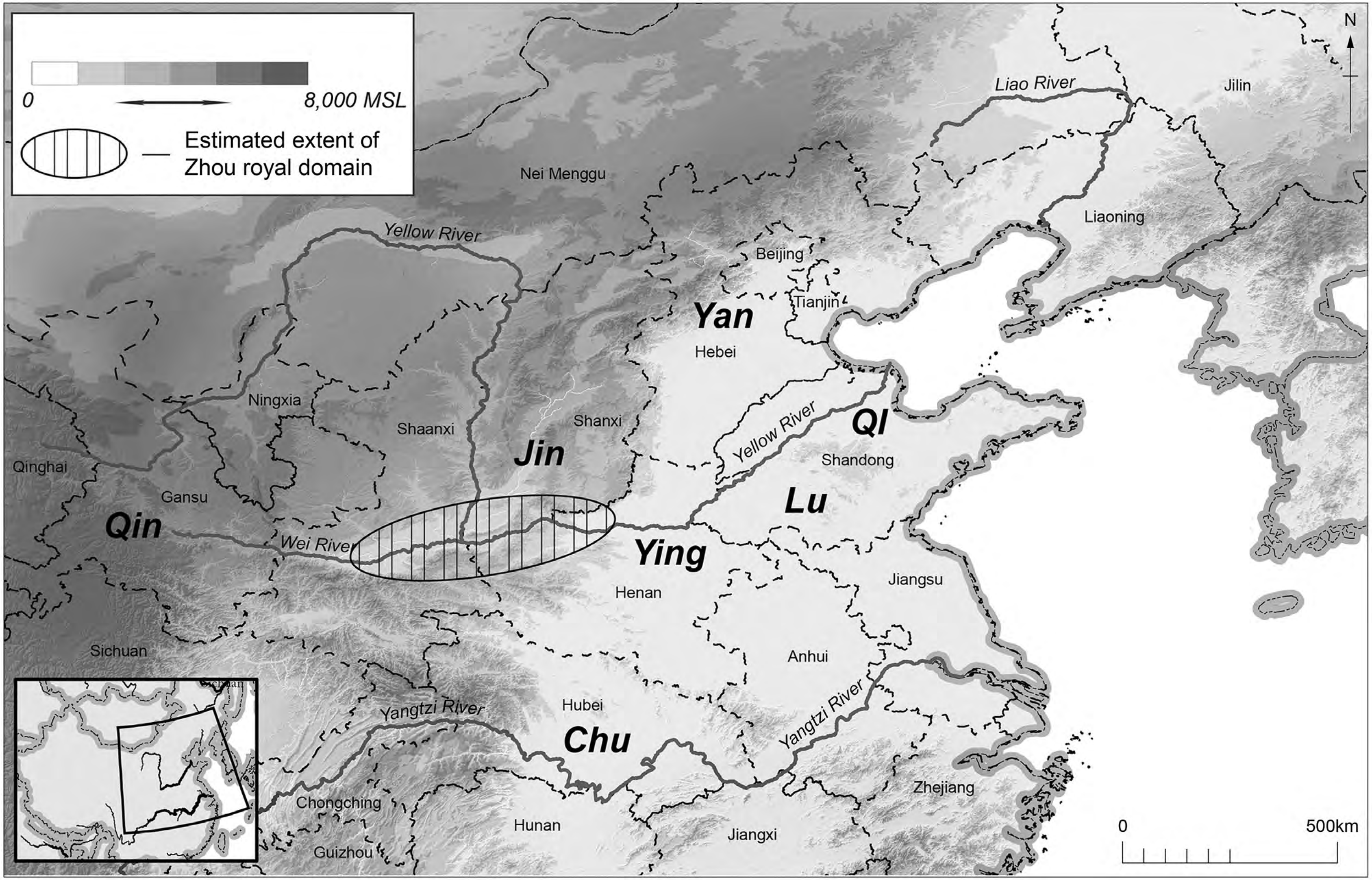

Figure 5.4.1 Map of the Main Western Zhou states

increasing process of 'Sinicization' and explores instead the region-specific developments this period of increased contact engendered.

In this chapter I employ globalization theory to provide a more nuanced approach to the study of the Western Zhou expansion. I begin by discussing the Zhou bronze ritual vessels – the single most important artefact of study for the Western Zhou period. These artefacts are often closely linked with Zhou domination and when found outside of the central Zhou territories, are believed by most scholars to reflect Zhou colonization and evidence for the acculturation of local peoples. The state of Yan 燕 – an important polity established by the Zhou only a few decades after the Shang were conquered – provides a case study for this new perspective on the Western Zhou expansion. The bronzes found in the realm attributed to the Yan polity are shown to have been locally used in a variety of ways that exemplify a continued incorporation of Zhou material culture into indigenous communities, rather than reflecting the expansion of the Zhou power and the subsequent assimilation of local peoples into their political order. More than just a unique period of colonization, this chapter finds the Western Zhou influence to represent an increased stage of interaction and connectivity within the larger process of globalization of this region.

Bronze ritual vessels and the Western Zhou expansion

Bronze ritual vessels are spectacular artistic and technological accomplishments of the Zhou dynasty. An exclusive artefact used by the Zhou kings and nobles, the vessels were dedicated to individual ancestors to be used in cult offerings performed at the many aristocratic lineage temples (van Falkenhausen 1993a). The vessels themselves are regarded as symbols of political power that reflected the status within the Zhou political system of the nobleman who owned them. Many of the vessels were inscribed to commemorate important events such as court appointments, military victories and legal matters in the life of the person who commissioned them (Shaughnessy 1999: 286–87). To date, hundreds of bronze vessels have been unearthed from graves and hoards and the inscriptions they hold are invaluable sources for the study of the Zhou dynasty (Rawson 1990; Shaughnessy 1991).

The bronze vessels play a special role in the discussion of the nature of the Zhou polity and the area it ruled. The way in which the inscriptions are read provide for very different reconstructions of the royal court and its relationship with the regional states. Herrlee Creel (1970) argued that the Zhou ruled a vast empire through a well-established feudal system of authority. The regional states they established were actually fiefdoms that were bequeathed by the Zhou kings to their kin in order to maintain a healthy relationship with members of the royal family (Creel 1970: 419–24). Hsu and Linduff (1988) similarly pointed out that feudalization and the endowment of land facilitated the Zhou expansion, as it allowed the central court to dispatch family members to govern distant lands (a process which also had the added benefit of appeasing aspiring family members and removing them from the court; both at the same time). The bronze vessels were cast to commemorate the contractual bonds between king and subject (Hsu and Linduff 1988: 178–79). Shaughnessy (1991; 1999) argued that the bronze inscriptions provided invaluable information on great political and administrative changes that transpired in the Western Zhou government. The bronzes contained investiture inscriptions that signalled the development of a professional class of officials as well as military and bureaucratic appointments of Zhou aristocrats (Shaughnessy 1991: 169). Li (2008) takes this a step further and reads the bronze inscriptions to reflect a fully developed bureaucratic system complete with specialized positions and offices. For Li, while members of the royal family were indeed charged with the expansion of the Western Zhou polity and the creation of new frontier states, they were all organized by a central authority bent on regional domination that incisively placed its regional polities in strategic locations (Li 2006: 70–76).

What is common to all these reconstructions of the Zhou polity is that they have relied heavily on later historical texts and information gleaned from inscriptions found in bronze ritual vessels, while other archaeological data have mainly played a second fiddle to the traditional narrative (van Falkenhausen 1993b). As a discipline firmly rooted in an historical tradition, archaeological interpretations of material culture in China have often been associated with ethnic groups that are mentioned, but frequently ill-defined, in historical texts (Di Cosmo 2002; Shelach 2009: 16). Accordingly, excavated Western Zhou ceramic types, but mainly ritual bronzes, are taken to reflect the process of Zhou conquest and colonization of the local populace (e.g. Fang 2013; Sun 2006).

In the last few decades, however, archaeologists have highlighted the poor correlation between ethnic groups and artefact assemblages (Hodder 1978; Insoll 2007; Shennan 1989), as well as advancing our understanding of the nuanced processes inherent in the interaction between disparate peoples. Culture contact and colonial encounters are now seen as multi-directional, and research focuses on studying the agency local groups exercised in situations of contact (Cusick 1998; Lightfoot 1995). This is true not only in cases of active resistance to domination, but also in cases of the selective adoption of new customs for gain and benefit (Gosden 2004; Stein 2005). Indeed, post-colonial research, the main source of inspiration for many of these contributions, has provided more nuanced approaches to these studies and heightened archaeological sensitivities to the complex processes inherent to cases of culture contact (Dietler 2010; Silliman 2005).

In their study of ancient cases of colonial culture contact, archaeologists have often times found the impact of these encounters to be unprecedented in scale and as reflecting a distinct changing point in the course of regional developments. While this was very likely the case for New World colonial encounters (Liebmann 2008), in others they were yet another episode of culture contact among many other instances that preceded them. Thus, even as post-colonial studies can illuminate the multi-faceted result of specific cultural interactions, they do not always represent the single most important event of contact (van Dommelen 2012). Instead, the entire spectrum of culture contacts, including those of colonial contact, must be observed contextually so that they may be situated in the longer trajectory of regional development.

Globalization offers a wider approach, geographically and temporally, that is most beneficial for cases of colonial contact among larger-scale processes of supra-regional developments. In the past few years, archaeologists have employed globalization studies in a number of ways (e.g. Feinman, Jennings, Knappett, Robertson, all this volume, and in Jaffe and Flad forthcoming). While many scholars simply employ the term globalization as synonymous with long-distance interaction (Frank 1998; Harris 2007; Jones *et al.* 2011), others investigate elements of globalization discussed by contemporary scholars and their cultural consequences (Jennings 2011). Contributions in Hopkins (2006), for example, highlight manifestations of large-scale dynamics such as the narrowing of the known world, and LaBianca and Scham (2006) view globalization as a framework for the study of the circulation of goods and ideas detached from the movement of peoples or predetermined power structures.

Similar to critiques that emphasize the multi-directionality of cases of culture contact as well as the changes that are inherent to them, globalization can highlight the fact that colonizers are not a monolithic single entity local cultures come into contact with (Hingley 2005; Pitts 2008). In addition, globalization need not view a single point in time as a unique catalyst of change, but can allow for a longer extraction of differing tempos and intensities of interaction (Gardner 2013; and the many contributions in this volume). Most importantly, globalization is not simply a process that results in a homogenized reality but, somewhat paradoxically, helps further create or elucidate local identities and differences as local peoples engage with novel cultural elements to idiosyncratically emulate, incorporate or react against (Hodos 2009, 2010). Drawing upon this body of scholarship, I employ globalization here as a model with which to investigate the early expansion of the Western Zhou dynasty. Examining the local contextual manner in which these Zhou ritual bronze vessels were used, a complex landscape emerges, unequal in the relationships it had with the new Zhou power. As I will argue below, while the coming of the Zhou people and the Yan state they established represent a significant episode of culture contact in this region, in many respects it is a continuation of long-term processes of contact that predated the Zhou arrival.

Local reactions to continued external interactions

Situated far away to the north-east of the Zhou royal domain, the Yan are credited with expanding the Zhou realm, establishing a foothold to the north and ultimately acculturating local peoples into the expanding Chinese civilization (Chen 2006; Jiang and Wang 2010) (see Table 5.4.1).

The majority of the data concerning the Western Zhou state of Yan comes from the Liulihe site (see location in Figure 5.4.2, as well as other sites mentioned in the text), where excavations have been conducted over the past 40 years. The excavators focused on the graveyard at the site and found that it was distributed in two different zones understood to reflect a separation of ethnic groups at the site (Beijing, 1995: 250–52). Further investigation of the spatial distribution of the graves and the placement and arrangement of artefacts in them has led to the conclusion that the overall pattern and style closely resembles those seen in the locales of the central Zhou realm (Sun 2001).

The Yan Zhou elite, like their counterparts in other regions in China, are credited with employing a mixture of strategies for establishing political and cultural domination (Sun 2006: 164–65). Concurrent with the traditional narrative that finds the process of Sinicization to have increased over time, scholars argue that throughout the Western Zhou period, Yan power continued to grow and with it its influence over local cultures and ethnic groups (e.g. Guo and

Table 5.4.1 Names and dates (all BCE) of archaeological cultures mentioned in the text

Central plain	*Liulihe area*	*Northern zone – Chifeng area*	*Northern zone – Southeastern region*
Erlitou二里头 (2000–1600)	Lower Xijiadian 夏家店下层 (2200–1600)	Lower Xijiadian 夏家店下层 (2200–1600)	Lower Xijiadian 夏家店下层 (2200–1600)
Erligang 二里岗 (1600–1200)	Northern Bronzes Complex (Late Shang and Early Western Zhou)	Lower Xijiadian 夏家店下层 (1600–1300)	Northern Bronzes Complex (Late Shang and Early Western Zhou)
Shang – Yinxu phase 殷墟 (1200–1050)	Zhangjiayuan 张家园 (1200–800)	Upper Xiajidian 夏家店上层 (1200–600)	Weiyingzi 魏营子 (1200–800)
Western Zhou 西周 (1050–770)	Yan state (1050–771)		

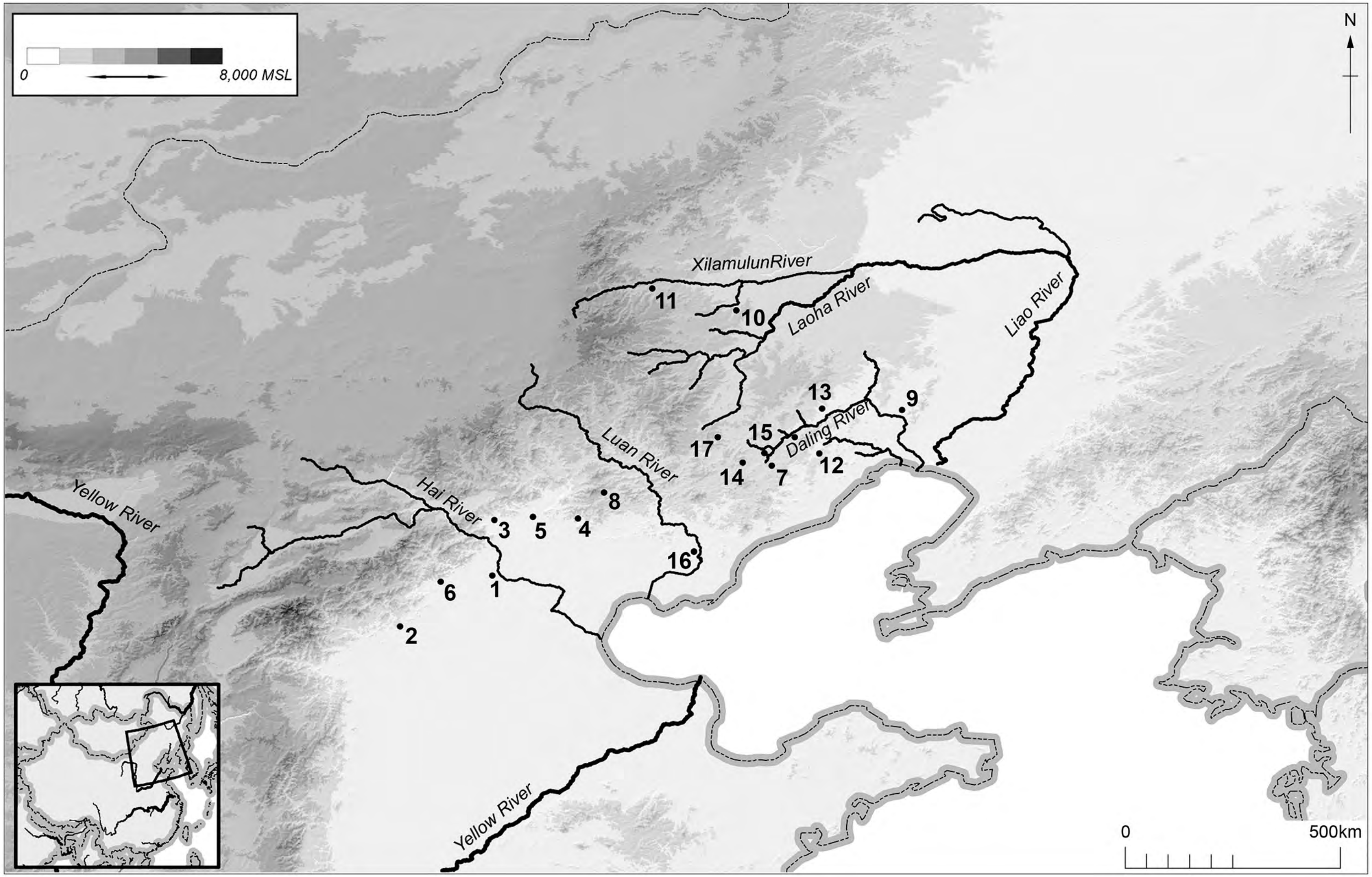

Figure 5.4.2 Map of sites mentioned in the text. (1) Liulihe, (2) Tangxian Nanfucheng, (3) Changping Baifu, (4) Liujiahe, (5) Shunyiniulanshan, (6) Fangshanzhenjianying, (7) Kazuo Shanwanzi, (8) Xinglong, (9) Huaerlou, (10) Toupaizi, (11) Tianbaodong, (12) Chaoyangwiyingzi, (13) Damiao, (14) Machanggou, (15) Beitaigou, (16) Xiaoshan, (17) Xiaheishigou

Zhang 2005: 420). During the later periods of the Middle and Late Western Zhou, this influence is taken to have increased, as the Yan state is believed to have enhanced its political power through strategic military expansion (Jiang and Wang 2010: 478).

Bronze hoards and caches found in this region are taken by many to demarcate the extent of the Yan polity and its expansion (Li 2006: 338–40; Jiang and Wang 2010: 476; Guo and Zhang 2005: 430–39; Chen 2006: 83–86). Bronze hoards are often found outside of any clear archaeological context and their date is based on their shape and decorative style. The hoard from Tangxian Nanfucheng 唐县南伏成, located only a few kilometres from Liulihe is a good example. Found in 1965, this cache contained five bronze vessels: a *hu* 壶，*pan* 盘，*yi* 匜，*li* 鬲 and a *ding* 鼎. Owing mainly to their style, the bronzes were dated to the Mid-Late Western Zhou period and were affiliated with the Zhou ethnic people (Zhen 1991). Several scholars believe that local populations adopted aspects of the introduced Zhou material culture as a way of tying themselves to the Yan state, and would acquire prestige by displaying Zhou symbols (e.g. Sun 2006: 170–72). Yet similar to the arguments made in other parts of China during the Zhou period, most view the finding of Zhou style artefacts, mainly bronze vessels and weapons, as reflective of Yan power and domination.

Another widely cited example for the integration of Zhou and local cultural elements is found in the Changping 昌平 site, located in Baifu 白浮 not far away from Liulihe. The three graves excavated at this site yielded more than 400 artefacts, made mainly of bronze, such as ritual vessels, weapons and horse ornaments as well as several artefacts made of jade and bone. More than 100 oracle bones were unearthed at the site, yet only a few of them were inscribed. Stylistically, the artefacts display a mix of cultural elements of different styles (Figure 5.4.3): standard Zhou styles found in graves resembling those found in the Zhu royal domain include those of the *Ding*, *gui* 簋 and *he* bronze vessels as well as horse ornaments (Beijing 1976: 255–58). The bronze weapons included a blend of Zhou style weapons, such as *ge* 戈 and *ji* 戟, alongside northern-style daggers and swords and two bronze helmets of the style found in the steppe to the north. A number of *fu* 斧 and *yue* 钺 axe heads were found as well, of no clearly delineated artistic tradition.

Even while these graves clearly contain a mix of artistic traditions, many scholars identify them as belonging to Western Zhou people dated to the Middle Western Zhou period (Guo and Zhang 2005: 446). These types of interpretations use stylistic components to not only date the graves, but also to assign ethnic identity as well. As this period is believed to have been largely one of Zhou expansion and conquest, when combinations of Zhou and non-Zhou artefacts are found they are almost always understood to belong to Zhou people or as reflecting a very strong Zhou influence on local peoples. Other sites such as Yaozhuang 要庄 and Yabazhuang 哑叭庄, for example, are seen as reflecting a strong Zhou influence on local groups (Sun 2006: 169–70), or as actual Western Zhou Yan polity settlements (Jiang and Wang 2010: 475).

However, a closer examination reveals a more complex situation. According to my analysis, the burial practices at the Liulihe cemetery reflect a large number of combinations of differing social identities that should not be classified by simple ethnic ascriptions. A multivariate statistical analysis performed on the burials showed that not only did non-Zhou indicators of group identity exist in the mortuary practices at Liulihe, but in fact no single burial style was used by the Western Zhou period occupants of the cemetery (Jaffe 2012). On the contrary, the burial style found at Liulihe was comprised of combinations of various forms of identity markers, including those of social status and prestige that were both similar to and different from Western Zhou customs, local practices and military markers. This result undermines the rigid dichotomization of Yan society based on exclusive ethnic characteristics. It also casts doubt on the rapid and total acculturation of local people by the Zhou (Jaffe 2012: 61–64).

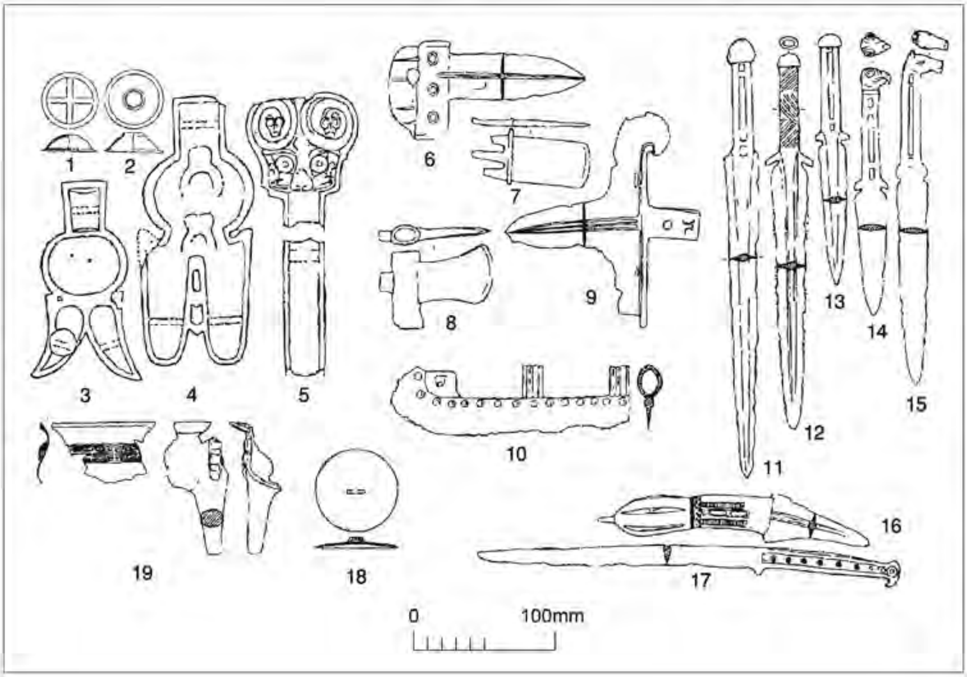

Figure 5.4.3 Bronze artefacts from Changpingbaifu. 1–5: ornaments (*pao* and *danglu*); 6: axe (*ge*); 7: axe (*yue*); 8: axe (*fu*); 9: halberd (*ji*); 10: halberd (*dai*); 11–13: central plain style swords and dagger; 14–17: northern-style daggers; 18: lid; 19: ritual vessel (*ding*); (after Beijing 1976)

Consequently I maintain that Zhou style bronze vessels and other artefacts should not be taken as direct indicators of Zhou expansion and the subsequent assimilation of local populations into the Yan polity. Instead, they should be analysed contextually in order to reveal the many ways in which indigenous populations exercised localized social identities. Looking at earlier cases of culture contact in this region allows us to place the Zhou arrival in a long process of interaction and to reveal the changing attitudes and strategies local communities had to external contact.

The late second millennium BCE in the north-east

During the first half of the second millennium BCE, the Lower Xiajiadian culture 夏家店下层 thrived in the north-eastern area of modern-day China (Guo 1996a). This culture represents a local high point in a sequence of the northern zone development (Shelach 1999). The exact demise of the Lower Xiajiadian culture and transition to the cultures that followed it is unclear. Some see the Shang influence in the twelfth and eleventh centuries BCE, prior to that of the Zhou, as one of the chief factors in the decline of the Lower Xiajiadian culture (Li 2004: 194). In the immediate area around Liulihe, two graves of the Lower Xiajiadian culture were found that contained mainly pottery and gold earrings, a distinct feature found in lower Xiajiadian burials (Beijing 1977). Close by, the remains of a settlement with both a cemetery and a residential area has been unearthed. A number of ceramic vessels were retrieved from ash pits exhibiting styles similar to those found in Yinxu, the centre of the late Shang polity, yet different from the ceramics found at the later Liulihe Yan graves. Thus, the site was dated to a pre-Yan period (Beijing 1997: 7). Whether these are the remains of a settlement inhabited by Shang people cannot be clearly determined, nor do we understand the actual influence, political or cultural, the Shang had on the peoples of this region.

Following the Lower Xiajiadian, a much less homogeneous material culture assemblage appeared in the region, with several new sub-regional ceramic styles. These later period archaeological cultures: Upper Xiajidian 夏家店上层, Weiyingzi 魏营子 and Zhangjiayuan 张家园, are seen as sub-regional ethnic groups, which developed from the earlier Lower Xiajiadian people (Wu 2004: 210). These cultures are commonly seen to have continued into the first half of the first millennium BCE, thus both predating the Yan and continuing alongside the Yan state.

The relationship between these local cultures and the arriving Yan is further complicated by the fact that archaeological cultures are used simultaneously to describe periods in time, as well as bounded ethnic groups. When amalgams of stylistic traditions are found, scholars attempt to see them as reflecting actual mixing of ethnic groups, as with the site of Changping mentioned above. Indeed, archaeologists have struggled to demarcate the Zhangjiayuan culture, found in the closest proximity to the Liulihe site, and still argue over its distribution and precise dating, as its graves and sites exhibit a mix of cultural elements: Lower Xiajiadian gold jewellery, northern-style weapons and Shang ritual bronzes. Later Zhangjiayuan period graves also include Western Zhou-style ritual bronzes of the style found at Liulihe (e.g. Beijing 1976). The debate regarding the extent and length of the Zhangjiayuan is an ongoing one, yet most archaeologists agree that it predated, or, at the very least, formed one of the key elements of local culture during the time of the Yan arrival. Liujiahe 刘家河 is one of the earlier sites identified with the Zhangjiayuan culture. Apart from a large amount of Zhangjiayuan-type ceramics, many Lower Xiajiadian elements such as gold earrings were found alongside Erligang- (attributed to the middle period Shang) style bronzes. The site is understood to have belonged to Lower Xiajiadian descendants who had a close relationship with the Shang during the Erligang and Yinxu periods, and might represent an initial stage following the demise of the Lower Xiajiadian culture in the region (Guo and Zhang 2005: 412–14).

During the latter periods of the Zhangjiayuan culture, dated to the arrival of the Western Zhou Yan, graves and sites such as Shunyiniulanshan 顺义牛栏山 and Fangshanzhenjianying 房山镇江营, found in the area around Liulihe, contained bronzes of Shang style found together with Zhangjiayuan ceramics. The Fangshanzhenjianying site included a relatively large stash of oracle bones (Cheng 1983; Guo and Zhang 2005: 76–78), an element seen by many as strongly linked to the Yinxu Shang (cf. Flad 2008). Yet unlike the Zhou colonial expansion there is little evidence that would point to an actual movement of Shang peoples into the region. Instead, it seems that a tradition of trade and local incorporation of artefacts predate the Yan and the inclusion of local artefacts continued after their arrival. Similarly, the findings of Zhou artefacts in later Zhangjiayuan sites should not be automatically viewed as acculturation or domination, but a continuation of earlier practices where local communities borrowed and incorporated external products as they saw fit.

Bronze hoards

Bronze vessel hoards containing Zhou-style artefacts are considered by many to reflect actual Zhou people settlements. Hoards found in the Kazuo region, an area attributed to the Weiyingzi culture, are by far the most abundant and are considered to reflect the extent of the Yan state expansion. One of the most well-known hoards is that found in Kazuo Shanwanzi 喀左山湾子.

This hoard contains several bronze vessels of typical Central Plain style and appears to be directly linked to Liulihe. Of the excavated 22 bronze vessels and weapons, 13 included inscriptions of clan names similar to those found at the cemetery of Liulihe. It has been argued that the bronzes were interred and left behind during the retreat of the Yan forces from the Kazuo area (Kazuo *et al*. 1977).

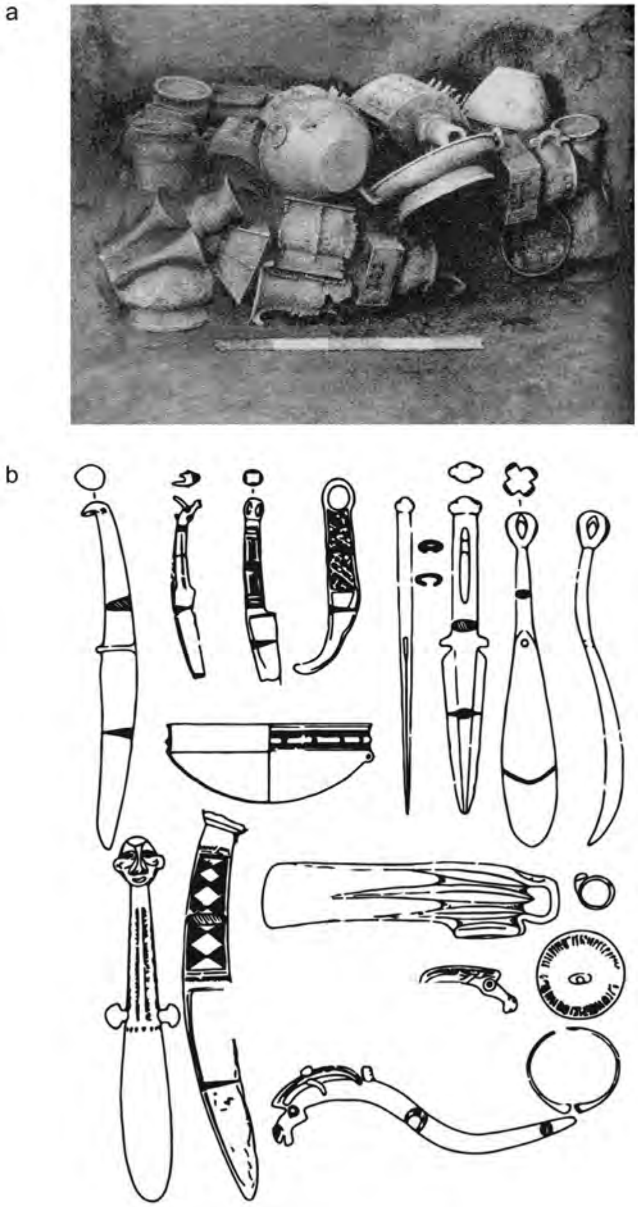

Figure 5.4.4 Bronze hoards from the Northwest and the central plains; (a) hoard no. 1 at Zhuangbai (in Falkenhuasen 2006: 30); (b) bronze vessels and weapons from Northern bronze hoards (after Guo 1995b: 201)

The notion, however, that all of the bronze hoards must reflect actual Yan occupied territories and the demarcation of Yan expansion may very well be an extension of more established explanations of Western Zhou hoards found in the Zhou royal domain – the Central Plains. The hoards there contain bronze vessels of Early through Middle and Late Western Zhou periods and are seen as familial ritual assemblages which were hastily buried as the Zhou court fled east in the early eighth century BCE, in fear of the invading Quanrong 犬戎 tribes (Rawson 1999: 439–40). While bronze hoards found within the Zhou royal domain can be attributed to Zhou peoples, we should question the assumption that those outside the royal domain did as well. First, a number of hoards contained mixed vessel styles of both Northern and Central Plain types. The Xinglong 兴隆 and Huaerlou 花儿楼 caches from Hebei and Liaoning both contained vessels and weapons of Zhou style, found together with northern daggers and swords, which are not known in the above-mentioned Zhou hoards (Xinglong and Wang 1990; Liaoning 1982). Apart from their non-Zhou style, the fact that weapons are found inside these hoards casts doubt on the 'fleeing Zhou' hypothesis: one would surely expect a fleeing elite to take their weapons with them (Figure 5.4.4). In fact, hoards of exclusive northern-style bronzes have a wide distribution throughout the northern region, suggesting that hoarding was not an exclusive Zhou practice. Furthermore, caches such as Toupaizi 头牌子, Tianbaodong 天宝同, Chaoyangweiyingzi 朝阳魏营子 and Damiao 大庙 contain only identifiable earlier period Yinxu and Erligang style bronzes (Keshenke 1977). Clearly, the custom of burying bronze hoards was not exclusive to the Zhou tradition, nor a novelty associated with their arrival. Despite the fact that northern complex bronzes are difficult to date, they could easily be earlier than the Zhou arrival (Guo 1996b; Shelach 2009: 29–31). In actuality, in the northern zone Western Zhou bronze hoards are quite rare, and they are usually found mixed with earlier Shang style bronzes (Kazuo *et al.* 1977; Li 1974; Liaoning 1982; Yang 2002: 474–77). I see no reason to state, as some do, that when earlier Shang styles are found together with later Zhou-style vessels, they should be viewed as caches of Shang ethnic groups who, while incorporated into the new Yan state, continued to hold on to elements of their more ancient heritage. In fact, a closer look at the inscriptions of Shang clan names on vessels from the bronze hoards as well as those of the Zhou style found at Liulihe, reveals a mix of various different clan and linage names that do not point to a single owner, group or clan (Xu 2010: 27).

Discussion – revaluating ownership of Zhou vessels in the north-east

The finding of ritual bronze vessels should not be taken to reflect Zhou ethnic markers or their domination in this region. Bronze vessels played a central role in the Western Zhou court and aristocratic world, yet as Cook (1997: 258) has already noted, bronze ritual vessels may very well have been perceived in a very different manner by non-Zhou people, even if they were still held in high regard. Instead, drawing on theories of globalization and of culture contact studies, they should be situated among the larger processes of interaction that came before them. By viewing the Zhou bronzes as an additional marker of prolonged contact, the local and regional specific manners in which they were incorporated emerge.

Recently, Xu Jian (2010) has challenged the traditional paradigm of a retreating elite hurriedly burying their valuables in the northern region. He rightly points out that the geographic locations of the hoards are usually overlooked. Focusing on the hoards of the Kazuo region, he found that a large number of them where deposited in dramatic settings, such as mountain tops or near water sources, and were frequently marked by rocks or flag stones. Xu proposes to view the hordes as ritual remains of nature worship ceremonies (Xu 2010: 28). While this ritual is not well known from the Zhou royal domain, it is more commonly known from the steppe and would suggest, if accepted, that local peoples incorporated Zhou ritual paraphernalia into their own ceremonies.

Interestingly, in the areas where bronze hoards were found, bronze vessels were rarely incorporated into local mortuary practices. Closer to the Yan capital at Liulihe, however, Zhou bronzes are found in local graves. Many Zhangjiayuan culture sites, such as Xiaoshandong 小山东, display both Zhou- and Shang-style bronzes found together in graves (Zhai and Yin 1997). However, the use of bronze vessels was selectively adopted to fit local needs. Analysis conducted by Csorba (1996) reveals that the grave structure, organizational features and contents, all suggest, at the very least, a non-traditional Zhou burial: while the Liulihe graves feature scaled structures with stepped ledges for the placement of the grave goods and human sacrifices, the Changping graves are simple vertical pit graves with a single skeleton (Csorba 1996: 580). Of further note is the location of weapons within the graves. In contrast to the Liulihe burials, where northern-style daggers were separated from the rest of the weapons and placed away from the interred, at Changping they were placed amid the rest of the weapons (Csorba 1996: 582). These finds all lead to the questioning of the simplistic ethnic ascription (i.e. 'Zhou') given to the inhabitants of these graves.

Elsewhere, elites of the Upper Xiajiadian communities to the north limited the use of Zhou bronzes to only the richest, largest and most labour-extensive graves (Shelach 2009: 140). This practice ostensibly restricted access to trade goods and was in stark contrast to earlier periods where exchange goods - while still prestigious and associated with wealth - were more commonly circulated among other segments of the population. Interestingly, at another Upper Xiajiadian site, Xiaoheishigou 小黑石沟, a number of Zhou bronze vessels were unearthed (Xiang and Li 1995: 6–7). Based on stylistic elements of bronze artefacts and ceramic sequences, the Xiaoheshigou site is dated to the latter part of the Middle Western Zhou period. This is a surprising find, as during the later Middle and Late Western Zhou periods, elite power at Liulihe wanes. In fact, the graves of later periods at Liulihe are not as elaborately furnished and, apart from two bells and one *ge* axe head, no bronze artefacts were found in them (Beijing 1995: 60 and 70). The remains of the habitation area that included a moat and drainage system are dated to the Early Western Zhou period, while Middle and Late period remains are scarcely known (Beijing and Beijing 1996). The Xiaoheishigou graves, in contrast, contain a large number of Zhou-style bronze artefacts, including ritual vessels, and many of the weapons are of Zhou origin or Zhou style (Shelach 2009: 127). Inscriptions cast in two of the bronze vessels found at Xiaoheishigou link the vessels to the Yellow River regions to the south (Shelach 1999: 217). Thus, not only did the Yan capital contain less Zhou ritual paraphernalia than did the non-Zhou sites around it, but the few bronze vessels that did exist in this region at this time were not even used by the Zhou elite. The bronzes were obtained either by force, perhaps from the raiding of southern Zhou sites, or acquired via trade independent of the Yan polity and its remaining elites. Both possibilities reflect, yet again, the growing weakness of the Yan polity's power during this period.

Shelach (2009: 144–45) has argued that as a result of the pressure from the Chinese powers to the south, societies in the northern zone developed unique material cultures that reflected both a consciousness rejection of southern symbols while maintaining local unique identities. Here, globalization offers a powerful framework with which to understand the mechanisms of this long-term diachronic process of contact by highlighting the periods and zones of intensified interaction for this region. Well before the Zhou arrived, the north-eastern region underwent a process of localization that resulted in the less homogenous material culture assemblages that followed the Lower Xiajiadian period. Much like the artefacts of the Shang before them, Zhou material culture – mostly bronze vessels – was incorporated in non-uniform manners among the many sub-regions of the north-eastern zone. Thus, somewhat paradoxically, while attempting to Sinicize the region, the Zhou, with their unique bronze artefacts, only helped to further diversify it.

Conclusion

That the Yan was a Western Zhou polity whose people brought with them new traditions, styles and influences, is not contested here. However, the actual findings of bronze vessels should not be ascribed to Yan and Zhou peoples only, or as reflecting their expansion by military conquest. Grouped in hoards or found in graves, these bronzes were also the product of trade and exchange or possibly the loot captured by local groups. In more than one case – Xiaoheshigou, Changping, and the hoards from Kazuo – the new Zhou bronzes were incorporated into existing lifeways. Bronze ritual vessels found in later hoards should instead be seen as a continuation of earlier traditions and avenues of exchange and not as the product of new and unprecedented Zhou influences. By observing variation in incorporation strategies (as discussed by Jennings, this volume) of local culture, the initial outside contact in this region can be found in the period prior to the Yan arrival: following the Lower Xiajiadian demise, when for the first time in this region bronze artefacts from the south (i.e the Shang) made their way north.

Interaction between the northern peoples and entities to the south existed well before the Western Zhou colonial expansion. The Zhou bronzes, like the Shang artefacts before them, were incorporated unevenly by local groups in different regions. The predisposed singling out of the Western Zhou period as one of immense impact misrepresents the long-term process of development this region underwent. Conversely, globalization provides a more robust model of connectivity for the north-east region. While the Zhou Yan polity at Liulihe was certainly no insignificant force, its arrival did not result in the unprecedented change highlighted by some. Instead, the Yan and their Zhou artefacts were viewed differently by local peoples and groups and their manipulation provided opportunities for local elites to harness them to their own advantage. The Yan themselves were no different and even at the time of their initial arrival, chose to incorporate local artefacts into their traditional mortuary practices and allowed indigenous peoples to participate in them (Jaffe 2012). By taking a wider standpoint and viewing the Yan polity as an additional episode of contact and interaction, the incorporation and rejection of Zhou influences by local communities in this region presents itself as another important stage among the increasingly growing process of connectivity this region underwent.

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5.5

Globalization at the crossroads

The case of southeast China during the pre- and early imperial period

Francis Allard

Introduction

It should come as no surprise that archaeologists have begun incorporating the concept of 'globalization' into their research, with numerous case studies revealing clear evidence of local culture change associated with the existence of inter-regional interaction. However, just as social scientists interested in current or recent periods continue to debate the many 'theories of globalization' presently in use (see Robinson 2007), archaeologists themselves hold diverging views regarding its applicability to pre-modern periods. In his recent book *Globalizations and the ancient world*, Justin Jennings argues that early instances of globalization have occurred on numerous occasions. In his view,

> All globalizations should (a) be triggered by a surge in long-distance connections that (b) caused the specific array of cultural changes associated with the creation of a global culture. If a period meets these two criteria, then it is a period of globalization.
>
> *(Jennings 2011: 21)*

Jennings' identification of early cases of globalization is furthermore informed by a set of eight trends, which he associates with globalization: time–space compression, deterritorialization, standardization, unevenness, homogenization, cultural heterogeneity, re-embedding of local culture, and vulnerability (Jennings, this volume).

While Jennings' detailed study of early instances of cross-regional interaction is to be applauded, efforts aimed at determining whether the 'globalization' label can be applied to specific cases should not detract from the more fundamental task of providing fuller analyses of the many variables associated with interaction and change. Recognizing the complexity of processes associated with interaction, and rejecting the view of globalization as consisting of unidirectional homogenizing currents emanating from 'centres' and impacting 'peripheries', some authors now refer to globalized systems as decentralized 'networks' of interaction, and globalization itself as 'complex connectivity' (Tomlinson 1999). The analytical framework proposed by Knappett (this volume) identifies four features of 'network connectivities', which should be kept in mind when examining the nature and impact of inter-regional interaction: frequency, strength, content, and directionality.

This chapter focuses on the impact of inter-regional interaction on early southern China. It does so through the application of a set of six variables that, although inspired by previous analyses, allows – it is suggested – for a more complete and layered understanding of the nature and impact of such interaction.

Elements of interaction: here broadly defined as encompassing the objects, knowledge, ideas, styles, and behaviours that originate at a 'source' and which then impact a 'recipient society' or 'societies' (i.e. southeast China for the purpose of this chapter).

Proximity of source and magnitude of interaction: basic to any study of globalization, these variables play – for each element of interaction – an important role in determining the nature and extent of culture change in the recipient society.

Channels of interaction: individual elements of interaction can enter the recipient society through restricted channels of interaction (e.g. ports-of-trade; government-controlled markets; the elite) and/or unrestricted channels (e.g. non-regulated trade; 'down-the-line' exchange networks; movement of people across borders).

Social and spatial penetration: elements of interaction may differ significantly in the extent to which they become distributed – for objects, as originals or as copies – through different sectors of society (e.g. restricted to the elite or a certain ethnic group) or spatially within the recipient society. Importantly, limited social or spatial penetration may result from elite-controlled access and/or bottom-up resistance to non-local ideas and objects.

Function/meaning: the incorporation of novel objects into a recipient society does not necessarily entail the persistence of their original use or meaning. For example, an object's original function and meaning may have been forgotten, or it may have been intentionally repurposed.

Impact: elements of interaction impact the recipient society in a number ways. 'Structural change' may be associated with novel settlements patterns (e.g. when population shifts toward ports-of-trade), the development of craft specialization, or the appearance of more complex socio-political structures whose elite control access to long-distance links and the redistribution of exotic products and symbols. In contrast, 'ideological change' is marked by the adoption of belief systems and customs reflecting new worldviews. Although we note the potential for interdependency between structural and ideological change, one should not a priori assume that interaction led to both types of change in equal measure.

This chapter focuses on the region known as Lingnan (岭南) – which consists of the present-day provinces of Guangxi (广西) and Guangdong (广东) in southeast China – between the eleventh century BCE and the beginning of the third century CE. For the purpose of this chapter and the identification of temporal trends, this 1,300-year-long period is subdivided into the following three sub periods:

1. The pre-imperial Bronze Age, from the eleventh to the third century BCE.
2. The brief Qin (秦) occupation period (214–208 BCE) and the period of the independent Nanyue (南越) kingdom (204–111 BCE).
3. The second half of the Western Han (汉) dynasty (111 BCE–9 CE) and the entire Eastern Han dynasty (25–220 CE). For this entire period, Lingnan (which at the time included a portion of present-day northern Vietnam) represented the Han empire's southernmost periphery.

The case of Lingnan provides an opportunity to investigate the workings of early inter-regional interaction and its outcomes. From a broad temporal perspective, historical and archaeological data leave in no doubt Lingnan's increasing level of interaction with outside regions over the course of the 1,300-year-long period, along with the marked impact resulting from such contacts. Having said this, a closer analysis of such developments – from the perspective of the variables discussed above – reveals a complex picture of interaction and change, one that for example points to the limited effect that objects often regarded as markers of globalization – exotic goods and other status symbols – had on Lingnan as a whole or on the process of inter-regional homogenization. Thus, it appears that the 'elements of interaction' with the greatest social and spatial penetration in Lingnan were those unrestricted artefact types and associated behaviours not channelled through the elite.

Eleventh century–214 BCE

The historical record

Textual evidence pertaining to Lingnan prior to its incorporation into the Qin state in 214 BCE is limited and paints an uncertain picture of the region's inhabitants and its relationship with polities to its north. References to Yue (越) or Baiyue (百越), non-Chinese groups who inhabited portions of southern China, often present these native populations in a negative light. The 'Songs of the South'/Chu Ci (楚辞) speaks of people with 'tattooed faces and blackened teeth' who 'sacrifice flesh of men and pound their bones for meat paste' (translation in Hawkes 1985: 224), while the 'The Annals of Lü Buwei'/Lü Shi Chun Qiu (吕氏春秋) compares them to 'deer, birds, and beasts', adding that their 'young order about their elders' (translation in Knoblock and Riegel 2000: 512). Although such references lack geographical specificity and reflect exaggerated stereotypes, they do at least point to the cultural distinctiveness of southern populations, including those groups who occupied Lingnan at this time.

A few references address the actions of Chu (楚), a state centred north of the Changjiang (长江) River, whose southern expansion during the Eastern Zhou (周) dynasty (770–221 BCE) may have reached north-eastern Guangxi, although these references as a whole paint an image of pre-imperial Lingnan as a region that remained outside central and northern China's political and military control (Allard 2004). Finally, a passage in the second century BCE 'The Master of Huainan'/Huainanzi (淮南子) states that the Qin emperor had – in 214 BCE – dispatched armies to the region because of 'the expected gains from the lands of the Yueh with their rhinoceros horns, elephant tusks, kingfisher feathers and pearls' (translation in Wang 1959: 8). This reference to prior knowledge of southern exotica – and their sources – highlights the likelihood that the Pearl River delta (Figure 5.5.1) had been acting as a collection and trading centre of coastal and southern products for some time prior to the arrival of the Qin in Lingnan.

The archaeological record

Indications of an association between culture change in Lingnan and objects originating north of the region predate the period discussed in this chapter by more than one thousand years. In northern Guangdong, wealthy burials of the so-called Shixia (石峡) Culture (*c.*3000–2300 BCE) contained copies of stone and ceramic artefacts associated with Liangzhu (良渚) Culture, centred some 1000 km north-east of Shixia along the lower reaches of the Changjiang River (Allard 1997). Although these objects – *cong* (琮) tubes, *bi* (璧) discs and *yue* (钺) axes – may not have maintained their original functions as they were incorporated into Shixia society, their presence in elite contexts in Lingnan suggests the possibility of a significant cultural impact at the local level.

The period between the eleventh and third centuries BCE is marked by increasing numbers of artefacts entering Lingnan from regions north of it. Of note are elaborate bronze bells and

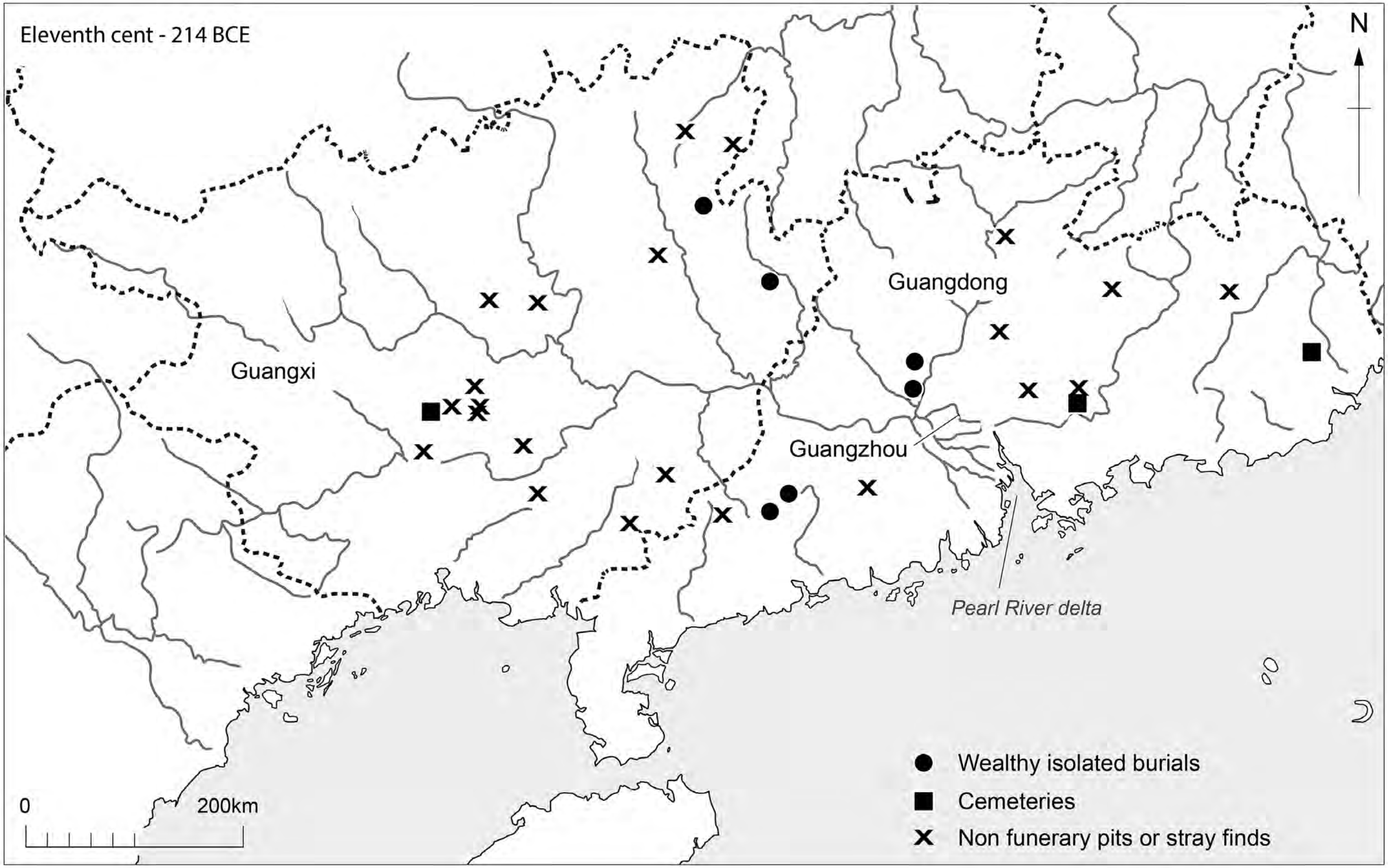

Figure 5.5.1 Bronze vessels and bells in Lingnan (eleventh century–214 BCE)

vessels recovered from a range of contexts in different parts of Lingnan (Figure 5.5.1). Except for the end of the period, most of these bronzes appear to have been manufactured in central or northern China and to have reached Lingnan through indirect exchange systems, such as sporadic down-the-line exchange along river valleys, suggesting in turn the possibility that their original functions had been lost by the time they reached Lingnan. Aside from the many bronze bells and vessels found in non-funerary pits or as stray finds with no associated artefacts (Allard 1995: 140–68), a small number have also been recovered from cemeteries dating to the period 1100– 600 BCE. Even though these early cemeteries display only limited evidence of social differentiation, there is nevertheless a clear association between wealth/status and access to these bronzes, which likely reached the areas of the cemeteries through the type of indirect exchange system discussed above. In this scenario, such bronzes would have stood out as unusual and impressive-looking objects in the eyes of Lingnan's inhabitants. Significantly, the association between status and access to bronze vessels and bells of northern manufacture becomes even clearer after 600 BCE, when the bronzes begin appearing in isolated wealthy burials, many of these located in the northern half of Lingnan along streams whose upper reaches provide access – across the Nanling (南岭) mountain range – to central China. Of note is the fact that these elite grave assemblages also include a number of locally distinctive artefacts – for example, animal- or human-headed bronze staffs – further indication that the burials were likely not those of Chu conquerors or colonists (Allard 2004, 2014: 818–21).

Many of the large bronzes recovered from Lingnan's wealthy (post-sixth-century BCE) burials are known to have played a role in the rituals of elites in central and northern China (e.g. the state of Chu). However, in contrast to the prescribed compositions of bell chimes (used in court music) and sets of (drinking and food) vessels in those areas, Lingnan's burial assemblages are marked by variation (among burials) in the number of bells and vessel types. Furthermore, Lingnan's later bells, some of which appear to have been local products, are also said to have had inferior musical qualities. Together, the available data point to the likelihood that these impressive bronzes would have been more important as prestige goods than as objects used in prescribed rituals of northern inspiration (von Falkenhausen 2001). Importantly, the small number of such bronzes argues against the operation of a well-developed, prestige-good economy.

The Qin and Nanyue periods: 214–111 BCE

The historical record

Following years of resistance by native groups, and attracted in part by access to southern goods at Panyu (番禺) – modern Guangzhou (广州) – the Qin established in 214 BCE three commanderies – *jun* (郡), also known as prefectures – in southeast China. Ten years later, the Qin's loss of control over its southern regions provided Zhao Tuo (趙佗), a Qin general of Chinese descent who had fought in Lingnan, with an opportunity to establish himself as the king of the 'Nanyue kingdom' – Nanyue guo (南越国). With Panyu as its capital, the kingdom is believed by modern historians to have extended over much of Lingnan and a portion of northern Vietnam. Over the course of his long reign, Zhao Tuo maintained an uneven relationship with the Han state to his north, sometimes agreeing to submit to Han authority but on occasion defying the Han and calling himself 'emperor'. He also promoted the incorporation of native Yue individuals into the administration and is said to have himself adopted Yue customs. Zhao Tuo was followed by his grandson Zhao Mo (趙眜) and three other descendants, who together ruled for a total of 28 years. In 111 BCE, following a period of factional fighting at the Nanyue court, Han armies were dispatched to Lingnan by the emperor Wudi (武帝).

The Nanyue king was deposed, the palace burned, and Lingnan was formally incorporated into the Han state (Taylor 1983: 17–27; Wang 1959: 8–13).

The texts provide important but limited information about the nature of Nanyue's links with the outside. We learn that Nanyue imported iron, weapons and animals from Han China (Taylor 1983: 24). Although what Nanyue provided in return is unclear, such trade is likely to have included exotic goods similar – or identical – to those that had initially attracted the Qin to Guangdong. Thus, the second-century CE 'Book of Han'/Han Shu (汉书) records that the tribute objects carried by a Nanyue mission to the Han emperor in 179 BCE included 'a pair of white jades, 1,000 kingfishers' feathers, ten rhinoceros horns, 500 purple-stripped cowries, a vessel of cinnamon-insects . . ., forty pairs of live kingfishers and two pairs of peacocks' (translation in Wang 1959: 13). Completed during the first decade of the first century BCE (i.e. soon after Nanyue's defeat), the 'Records of the Grand Historian'/Shi Ji (史記) identifies Panyu as 'the collecting-center of rhinoceros horns, elephant tusks, tortoise-shells, pearls, fruits and cloth (of hemp and other fibrous plants)' (translation in Wang 1959: 8). Importantly, the texts are silent about the nature and range of maritime trade in the South China Sea – the likely source of some of these exotic objects and materials – or even whether such trade was carried out on Nanyue or foreign ships. Even so, the texts on their own suggest that in its role as trading intermediary between Han China and southern regions, Nanyue already stood at the crossroads of overlapping inter-regional currents.

The archaeological record

In contrast to the few Qin period archaeological sites known so far – burials and portions of a shipyard located below the later Nanyue palace – over 500 graves and a small number of habitation sites dating to the Nanyue period have so far been excavated in Lingnan. These include the impressive tomb of Zhao Mo and the Nanyue palace, both located in Guangzhou, and the two large and wealthy tombs found at the site of Luobowan (罗泊湾) in Guangxi (Guangxi Zhuangzu zizhiqu bowuguan 1988). Although no Lingnan-wide study of Han dynasty (including Nanyue-period) burials has yet been published, it is possible to extract valuable information from a 1981 archaeological report titled 'Han tombs in Guangzhou' (Guangzhou shi wenwu guanli weiyuanhui *et al.* 1981). Of the 409 Han dynasty burials identified in the report, 182 have been dated to the Nanyue period. Some of the observations summarized below regarding Nanyue burial practices and contents are based on this report, while additional information regarding both funerary and non-funerary remains dating to the Qin and Nanyue periods in Lingnan is available in a number of short articles and syntheses (Allard 2006: 238–44; Guojia wenwuju 2009: 392–95, 409–11; Zhongguo shehui kexueyuan kaogu yanjiusuo 2010: 142, 482–95). Even without a systematic regional study of Qin and Nanyue remains, Guangzhou's archaeological record leaves in no doubt the importance of Panyu at this time.

Location of burials: the few known Qin-period burials include one in Guangzhou and another in north-east Guangxi. Recent syntheses of Nanyue archaeology indicate a concentration of graves in the Guangzhou area (and nearby counties to its west), with the remaining burials found in a small number of counties in Guangdong and Guangxi (Figure 5.5.2). Importantly, the majority are located in the northern half of Lingnan, near waterways that provide access to the Nanling mountain range – and thus to Han China – with those situated near the Pearl River delta pointing to the likely importance of access to maritime trade routes (through Panyu). One exception to this spatial distribution is the county of Guixian (贵县) in central Guangxi, where tomb 1 at the site of Luobowan may have been that of a native leader with links to the Nanyue court in Guangzhou, an interpretation based on the local style of some of its grave goods.

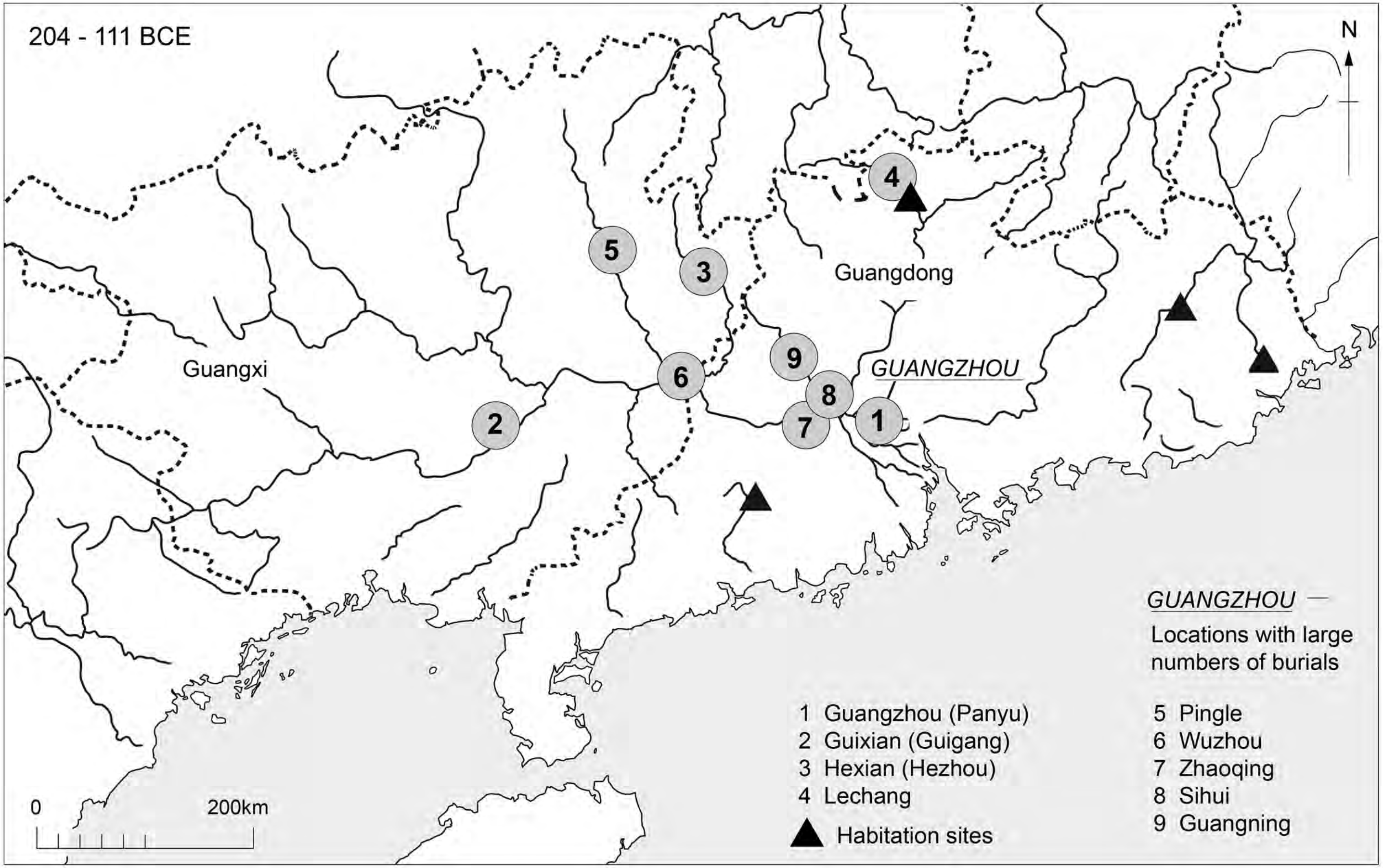

Figure 5.5.2 Concentration of Nanyue period burials in Lingnan (204–111 BCE)

Structure of burials: Han-type burial features appear in Lingnan at the beginning of the Nanyue period, superimposing themselves on earlier local traditions of vertical pit burials, pebble floors, waist pits, and (occasional) wooden coffins. These novel Han features include tomb ramps and compartmentalized (wooden) coffins, both traits common in larger and wealthier graves, in contrast to the smaller and poorer burials, many of these simple vertical pits with a waist pit or pebble floor. Regional variation in the incorporation of Han features is worth noting. The tomb of Zhao Mo is the most elaborate Nanyue-period burial known to date in Lingnan. Dug into the side of a hill, the 17-metre-long tomb has a ramp and is partitioned into a number of cross- and length-wise chambers in an arrangement similar to that of other elite tombs in Han China. Large stones were used to line the walls of the chambers, a feature which paralleled similar but slightly earlier developments in regions north of Lingnan. Of the 182 Nanyue-period burials described in the 1981 report on Han burials in Guangzhou, 161 had wooden coffins (some of these compartmentalized), while 43 had ramps, indicating the high status of many tomb occupants buried in and around the capital. Two elite cemeteries in the Guangzhou area consisted of only large and medium size graves, many with wooden coffins and ramps.

Tomb 1 at Luobowan in Guangxi is a large pit grave covered by an earthen mound, with the 40-metre-long ramp leading to a 6-metre-deep wooden chamber measuring 14 x 10 metres and partitioned into 12 compartments. Aside from this and a few other exceptions, most of Lingnan's Nanyue-period burials outside the Guangzhou area tend to be small and structurally simple. Two cemeteries in northern Lingnan help illustrate this pattern. At Duimianshan (对面山) in Lechang County, only seven of the 53 Nanyue-period burials had a ramp, while none is reported to have had a wooden coffin. Of the 110 Qin- and Nanyue-period graves at Yinshanling (银山岭) in Pingle County, ramps are recorded for only three burials.

Habitation sites: Lingnan's pre-eminent habitation site during the Nanyue period is the Nanyue palace, located a few kilometres southeast of Zhao Mo's tomb in the centre of Guangzhou. The palace site, whose scale, structure, and material remains mark it as a singular development with no antecedents in Lingnan, provides ample evidence of the incorporation of architectural and aesthetic elements originating in Han China, and possibly from more distant regions as well. The remains associated with the two large buildings include covered galleries, drains, column bases, paving and roof tiles (many with impressed designs), terraces, dressed sandstone slabs, wooden troughs, wells, stone lintels, balustrade posts, ceramic vessels and sherds (some with inscribed characters), iron tools and weapons, and coins. At one end of the site is a 'garden', whose elements include a 180-metre-long winding canal, a flat stone bridge, a water gate, a crescent-shaped pool, wave-generating 'bumps', and sandstone slabs used to line the bottom of the stream. There is also a large (4,000 m^2) man-made pond with sides paved with stone slabs, and whose stone columns may have supported buildings above the pond. Of note is the recovery from a well of over 100 wooden slips, whose inscriptions provide information on place and building names, the appointment of officials and palace management, all of which underscore the importance of Han China as a template for administering the state of Nanyue.

A number of intriguing elements have also been noted at the palace, including its many stone structures (columns, balustrades, lintels, canal, pond), which contrast with Chinese traditional timber and stamped earth architecture. Interestingly, the octagonal stone columns built in sections and the fitted polygonal stone slabs used in building the pond have no known counterparts in Han China, with some scholars suggesting a western origin – the Mediterranean region, West Asia, or Central Asia – for these elements, an interesting hypothesis in need of further discussion.

A few smaller sites believed to date to – or at least overlap with – the Nanyue period, have also been identified in Guangdong (Figure 5.5.2). At these locations, objects and architectural elements similar to those identified at the Nanyue palace include roof tiles (some inscribed with

Chinese characters), impressed paving tiles, ceramics, a winding corridor, a stone paved path, a courtyard, small buildings, as well as a U-shaped building consisting of a courtyard and side wings. Archaeologists have suggested that one of the sites functioned as the emperor's temporary residence when away from Panyu.

Grave goods: Burial assemblages during the Nanyue period provide a window into the multi-faceted impact that Han China had on the lives and belief systems of Nanyue's inhabitants. Found in grave assemblages alongside regionally distinctive artefacts (e.g. bronze pails and some ceramic vessel types), newly introduced objects and object categories of Han origin or inspiration include bronze and ceramic vessels such as hu (壶), he (盉), ding (鼎), and fang (钫), incense burners – xunlu (熏炉) – bronze mirrors, bronze coins, crossbow mechanisms, jade bi (璧) discs and pendants, inscribed seals, ink stones, lacquered objects, human figurines, as well as (by the end of the Nanyue period) ceramic stoves and models of wells. In consideration of the nature of interaction between Nanyue and the Han state to its north, it is not unreasonable to propose that many of these 'Han-style' objects played the same (or similar) roles once incorporated into Nanyue contexts. Thus, mirrors were thought to repel evil spirits, incense burners facilitated communication with the world of spirits, and jade bi discs had cosmological associations. A ritual function may also be assigned to vessels such as hu and fang. Together, these many novel elements in Nanyue underscore Han China's increasing impact on the ideological world of its inhabitants, although some of these elements may have been mostly restricted to the elite sphere during this period (see below).

Many of the 182 Nanyue period burials recorded in the 1981 report on Han burials in Guangzhou contained Han style objects. While some of these artefacts (e.g. seals, bronze vessels, bronze incense burners, coins, jade pectorals) were recovered from a small number of graves – and were likely associated with high status individuals – others (e.g. ceramic vessels) were more widely distributed. These burials stand in stark contrast to Zhao Mo's tomb, which yielded over 1000 grave goods. Significantly, local style objects (e.g. 'Yue-style' tripods and bronze pails) made up a small proportion of Zhao Mo's tomb assemblage. Most prominent were Han style objects, which included not only numerous examples of the object types listed above, but also some found only in his tomb: a jade suit, bronze musical instruments, gilt bronze hu vessels, bronze ding vessels, and weapons inlaid with gold and silver. Both in terms of structure and grave contents, Zhao Mo's tomb therefore stands as a conspicuous attempt at emulating elite – more specifically royal – funerary practice in Han China.

Further west in Guangxi, tomb 1 at Luobowan also contained over 1000 artifacts, many of these either made north of Lingnan or inspired by Han techniques and tastes. These include some of the ceramic and bronze vessel types mentioned above, as well as mirrors, lacquered containers, a jade cup (similar to the one found in Zhao Mo's tomb), a jade seal, two jade bi discs, and a bronze tube decorated with images painted in lacquer. Of note is a three character inscription on one of the ding vessels which suggests production in northern China, followed by its movement first to Panyu and then to Luobowan. In comparison to Zhao Mo's tomb, tomb 1 at Luobowan contained a larger number of artefacts of local style and manufacture: bells, bronze drums, bronze pails, and ding vessels with splayed feet, all of these common in China's southwestern and/or southern regions (including northern Vietnam). Located some 500 meters east of tomb 1 at Luobowan, and believed by some to be that of the wife of the tomb 1 occupant, the poorer and smaller tomb 2 also contained a number of objects of Han inspiration or manufacture. Although available reports and syntheses indicate the recovery of Han style objects from other burials in Guangxi, none rival the Zhao Mo or Luobowan tombs in wealth, while concentrations of multiple burials with such objects have not been reported.

Turning now to burial goods whose appearance and/or composition differ from that of Han-style objects, we first note a wide range of highly distinctive objects and substances found in

Zhao Mo's tomb. These include unaltered materials (e.g. elephant tusks, antelope horn, pearls, frankincense), Han-style objects made of non-local minerals (e.g. seals made of agate and rock crystal), objects that were likely produced at locations outside Han China (e.g. glass beads, gilt bronze plaque with animal designs), and objects which combine elements from China and more distant regions (e.g. silver 'box', jade rhyton, glass ornamental plaques). Although it is difficult to pinpoint the place of manufacture of these objects, or for that matter the routes along which they travelled before reaching Nanyue (if they were not in fact produced there), a number of features point to the steppes and western Asia as sources of technical or stylistic inspiration and knowledge. Importantly, most of these burial goods are found in small numbers and make up only a small proportion of Zhao Mo's grave assemblage, suggesting an absence of a well-established long-distance trade in such exotic goods at this time.

Only five or so burials of 182 Nanyue-period graves included in the 1981 report contained 'non-Han-style' objects and materials. Interestingly, these included ceramic copies of rhinoceros horns and elephant tusks, indicating the likely importance of such exotics as prestige goods. In Guangxi, Luobowan tomb 1 contained three small agate objects, two amber beads and one fragment of glass/rock crystal. Non-Han-style objects were absent from both the nearby Luobowan tomb 2, as well as from the rich Nanyue-period tomb at Jinzhong (金种) in north-east Guangxi.

Defeat of Nanyue (111 BCE)–end of the Han Dynasty (220 CE)

The historical record

The defeat of the Nanyue kingdom in 111 BCE was followed by its incorporation into the Han empire and initial subdivision into nine commanderies: four in Lingnan, two on Hainan (海南) island, and three in present-day northern and central Vietnam. Passages point to the establishment of an administrative structure that included governors (of individual commanderies) assisted by military and civil officials. Native leaders – some of whom were given titles – likely played a role in attempts at documenting – and probably taxing – the indigenous population. In reality, the Han court's incorporation of the southern regions was faced with a number of challenges. First, the region's remoteness meant that it had to rely on Han officials whose behaviour was difficult to monitor, and against whom native populations often rebelled (Allard 2006: 234–38, 249–52; Loewe 2004). Second, the Han Chinese remained a demographic minority in Lingnan throughout the period, with much of the region remaining culturally unassimilated and fragmented. Writing at the end of the Han dynasty, one local official pointed to Lingnan's lack of cultural and linguistic uniformity, the uncivilized nature of many of its native groups, and shortage of officials to govern them. Some of the passages do refer to attempts aimed at teaching and encouraging reading, agriculture, appropriate marriage practices, and clothing (such as the wearing of hats and shoes), with schools even established for that purpose (Loewe 2004: 68–69). Even with such efforts, however, there is little doubt that Lingnan at the end of the Han dynasty had been only partially incorporated administratively and culturally into the Han sphere.

One set of passages speaks of long distance contacts along the southern maritime route. Of these, a lengthy entry in the Han Shu refers to imperial eunuchs travelling to distant southern regions and nations at some unspecified date during the decades following the fall of Nanyue (Wang 1959: 19–20). Travel appears to have been done on Chinese (possibly Yue) and foreign merchant ships and to have reached as far as the eastern coast of present-day India. The eunuchs acted as trade envoys, exchanging Chinese gold and silk for 'bright pearls, opaque glass, rare stones and strange things' (translation in Wang 1959: 19–20). Other later passages refer to foreign delegations travelling to China, including one such mission in 166 CE from Daqin (大秦), identified as Rome. The tribute objects mentioned in these passages include rhinoceros horns, elephant tusks, tortoiseshells, as well as a live rhinoceros. Regardless of where precisely these missions and different products originated, the weight of the textual evidence – including references to the coastal trading ports of Hepu (合浦) in Guangxi and Xuwen (徐闻) in Guangdong – points to the increasing importance of maritime contacts with regions and polities reached by travel through the South China seas.

The archaeological record

No systematic study of late Western Han and Eastern Han burials in Lingnan has yet been published and our knowledge of the funerary landscape at this time relies on a small number of sources, including the 1981 report on Han tombs in Guangzhou, which identifies 227 burials dating to this period. One synthesis of Han archaeology in Lingnan mentions over 2,500 excavated post-Nanyue burials. Although none approach the Zhao Mo tomb in size or contents, many wealthy graves have been excavated at the coastal site of Hepu, which grew significantly following the fall of Nanyue. A small number of habitation and other non-funerary sites – all smaller than the Nanyue palace – have also been reported (Allard 2006: 238–44; Guojia wenwuju 2009: 392–95, 409–11; Zhongguo shehui kexueyuan kaogu yanjiusuo 2010: 482–95).

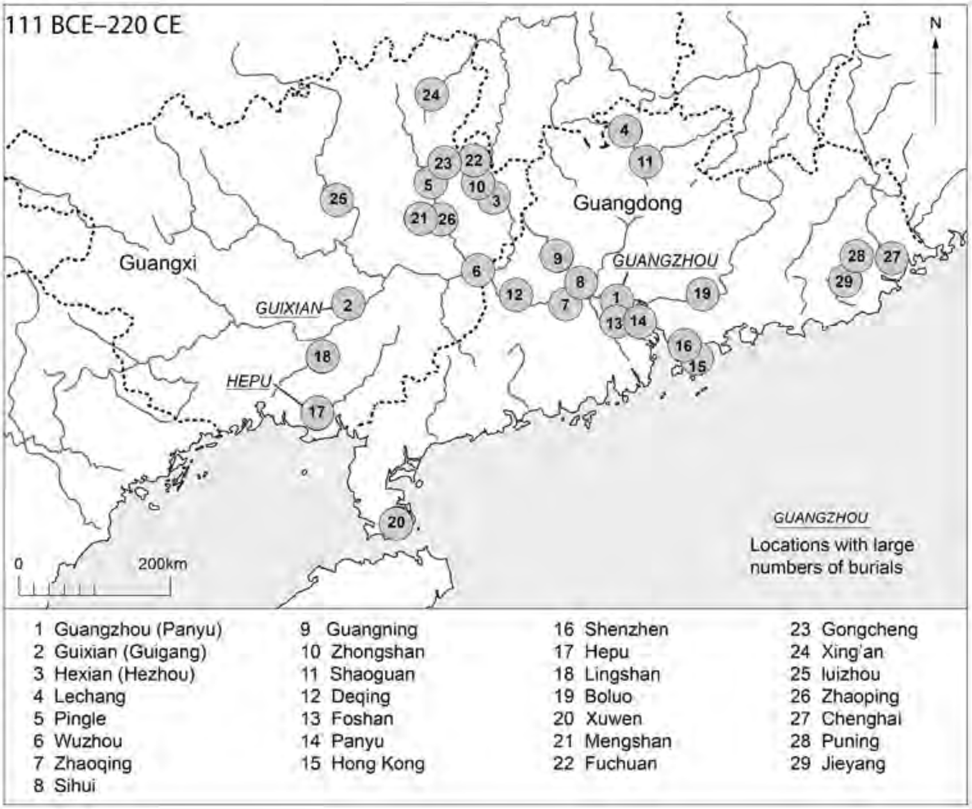

Figure 5.5.3 Concentrations of Late Western Han – Eastern Han burials in Lingnan (111 BCE–220 CE)

Location of burials: the period witnessed a significant expansion of funerary evidence beyond that recorded for the Nanyue period, with burials now found in about 30 counties and cities (Figure 5.5.3). Burial locations generally fall into one of three settings: (1) close to rivers flowing south from the Nanling mountain range, indicating the enduring importance of contacts with the rest of Han China; (2) close to rivers that provide access to nearby coastal areas; and (3) coastal locations. The latter's emerging importance is tied to the increasing scale of maritime contacts and trade mentioned above, with especially large concentrations of burials found in the Pearl River delta (including Guangzhou) and at Hepu. Significantly, very few or no Han period burials have been found in a number of areas, including the western half of Guangxi and southern Guangdong, spatial gaps which help guide our understanding of the extent and nature of Han control in Lingnan at this time.

Structure of burials: various burial types are recorded during this period. Vertical pit burials (which predate the arrival of the Qin) remain in use until the end of the Han dynasty, as do tombs with wooden coffins and ramps (introduced during the Nanyue period). Most significant is the introduction, during the first century CE, of Han-type brick tombs (some with vaulted roofs and chambers), which come to make up the majority of burials in Lingnan by the end of the dynasty. Typological variation within Lingnan points to the uneven adoption of northern structural models and the blending of different architectural styles. Such variation includes: (1) the high concentration of brick tombs in the Guangzhou area; (2) the scarcity of brick tombs and popularity of vertical pit burials in a number of northern counties near the Nanling mountains; (3) the popularity of bi-level wooden chambers in the Guangzhou area (and their absence in Guangxi) throughout much of this period; (4) the use of tombs combining bricks and wood, beginning in the first century CE in both Guangxi and Guangdong; (5) the appearance in northeast Guangxi of stone built-tombs; and (6) the appearance of generally small tombs built of both stones and bricks in Xuwen.

Grave goods: burial assemblages during this period increasingly consisted of Han-style objects, maintaining a trend begun during the previous Nanyue period. By the end of the Western Han, approximately half of the graves contained bronze mirrors and coins, with lacquered objects (reflecting the influence of central China) now found in many burials. Particularly interesting are changes in the ceramic assemblages, with Han-style vessels common during the Nanyue period (e.g. ding, he, hu, fang) now replaced by new vessel types and other distinctive ceramic artefacts commonly found in other parts of Han China: models of houses, granaries, stoves, wells, poultry and livestock, with the latter two ceramic animals present in almost all burials by the beginning of the Eastern Han period. Importantly, just as with the mirrors, incense burners, bi discs and vessel types introduced during the Nanyue period, this dramatically novel representation of the productive and domestic spheres in funerary contexts underscores the impact that Han China had on the ideological lives and belief systems of Lingnan's inhabitants. Having said this, the overall trend toward homogenization should not conceal variation within Lingnan itself. For example, cemeteries in Zhongshan (钟山) and Lechang – two counties located at Lingnan's northern periphery – contained no jade pendants or ceramic models of buildings, structures or animals. As mentioned earlier, these northern locations also maintained an earlier tradition of vertical pit burials, in contrast to the increasing popularity of brick tombs in other parts of Lingnan by the Eastern Han period.

Of particular interest is the significant increase in the number of non-Han-style objects of distant origin or inspiration in the graves of this period. This set of artefacts consists overwhelmingly of beads made of glass, agate and amber, with rock crystal, amethyst and garnet beads found in smaller numbers. The beads are typically found as components of necklaces, although earplugs and small sculptures of lions made of some of these materials have also been found.

Although the place of manufacture of these beads and other objects remains a topic of ongoing research, archaeologists agree that most reached Lingnan along the southern maritime route, originating at various locations – extending as far as western Asia – known for the production of such beads and/or the presence of appropriate mineralogical sources.

Burials at a few coastal locations help illustrate the extent of the social and spatial penetration of these exotic goods. At the site of Fengmenling (风门岭) in Hepu, seven burials contained thousands of beads (most as elements of necklaces) made of glass, rock crystal, agate and amber, along with a small number of amber and agate sculptures of lions and sheep. According to a recently published article on Hepu during the Han dynasty, imported objects such as 'glass, garnet, amber, rock crystal, beryl, agate, etched carnelian beads, gold polyhedral beads, pearls and other exotic objects' were recovered from 'large and medium-sized tombs belonging to a wealthy class of individuals including officials and merchants' (Xiong 2014: 1233). In the Guangzhou area, 72 burials (i.e. one-third of the 227 dated to this period) contained a total of over 7000 beads. Also found in Guangzhou's burials were a number of locally made artefacts associated with maritime trade: two ceramic and two wooden models of boats, and 18 ceramic lamps (in 15 burials), each consisting of a foreign-looking individual holding up the dish of the lamp. While we note the significant number of exotic goods found in graves at Hepu and Guangzhou (with some also found in Guixian and Wuzhou 梧州), the lack of a comprehensive study of Han period tombs in Lingnan prevents us from gauging the extent to which such objects penetrated further inland. Having said this, the available data does suggest that exotic goods reaching southeast China along the southern maritime route enjoyed only limited socio-political and spatial distribution within Lingnan.

Patterns of interaction and culture change in Early Lingnan

The above review of historical and archaeological data pertaining to the region of Lingnan between the eleventh century BCE and the third century CE highlights the fact that cultural change in Lingnan during this period was in part driven by contacts with areas north of it as well as with more distant regions. Beyond such general observations, the set of variables presented at the beginning of this chapter also serves as a guide in the identification of four somewhat distinct categories of elements of interaction (and their impact) on Lingnan.

1. Objects of Han Chinese origin (or copies of such objects) marked by highly constrained social and spatial penetration and the likely maintenance of the objects' original functions and symbolism in Han contexts. Examples include objects restricted to Zhao Mo's tomb (e.g. the jade suit, bronze bells, gilt bronze vessels), as well as artefacts found in both Zhao Mo's tomb and tomb 1 at Luobowan (e.g. jade cups).

2. Objects of limited social and spatial penetration, most often associated with elite contexts and whose original function/meaning (if any beyond a purely aesthetic role) may have been lost in the process of transmission. It is likely that many such objects were primarily regarded as rare and desirable 'exotic' goods. Although their precise influence on ideology is difficult to gauge, their association with elite contexts points to their aesthetic appeal and/or use in displays of power. Examples include bronze vessels and bells originating north of Lingnan and found in pits or burials dated between the eleventh and third centuries BCE; objects of likely origin along the southern maritime route or from other distant regions, and found in small numbers in the tomb of Zhao Mo and a few other burials in the Guangzhou area (e.g. elephant tusks,

antelope horn, pearls, frankincense, gilt bronze belt plaques with animal designs, jade rhyton); and beads – many of probable foreign origin – found in post-Nanyue period burials in both in Hepu, Guangzhou and a few other locations.

3. Architectural design elements and technical knowledge of highly limited social and spatial penetration. These include the Han-inspired overall layout of the Nanyue palace (and a few other sites in Guangdong), as well as a number of intriguing and apparently non-Chinese elements at the palace (e.g. stone columns, balustrades, and fitted polygonal stone slabs), which, some have suggested, originated in distant western regions.

4. Objects and behaviours originating in Han China (rather than from locations along the southern maritime route) and enjoying greater social and spatial penetration than those elements discussed above, with reproduction at the local level accounting for much of their expanded distribution in Lingnan. Such broad distribution itself points to the likely operation of multiple processes and conditions, including non-restricted access to such northern Han-style elements (especially after the Nanyue period), along with the emulation of Lingnan's elite, the latter of whom may have actively or passively mediated each element's use and meaning for the local population. The proximity and increasing intensity of interaction between Lingnan and Han China furthermore suggests that these many elements likely played the same – or a similar – role once adopted by Lingnan's inhabitants. Examples include a wide range of bronze and ceramic vessels and objects found in Nanyue- and/or later Han-period burials (e.g. bronze mirrors, incense burners, ceramic houses and animals), as well as tomb structure itself (e.g. Nanyue-period chambered wooden tombs with ramps, and later Han-period brick tombs).

Beyond the undoubted impact that objects, ideas and symbols of non-local (especially Han Chinese) origin had on elite and non-elite ideology and behaviour, we also note a number of structural changes brought about by inter-regional interaction. For example, the accelerated development of socio-political hierarchies in Lingnan itself was clearly associated with – although not necessarily the outcome of – the intensification of such interaction. Throughout the period in question, there is evidence of some individuals – local leaders in earlier periods and officials and kings during the Nanyue and Han periods – gaining preferential access to rare 'exotic' objects of distant origins and/or to exquisite Han-style objects, whose display undoubtedly served the purpose of representing and validating their power and ambitions. The impact of inter-regional interaction is also apparent in the location of rich burials, whose distribution may reflect population concentrations. Thus, Lingnan's wealthiest graves between the sixth century BCE and the end of the Han period tend to be located in its northern sector, with most situated near rivers that provide upstream access to central China. Furthermore, the growth of Guangzhou (Panyu) in the Pearl River delta itself points to the growing importance of maritime links beginning in the Qin period, as does the emergence of Hepu and other coastal locations starting in the first century BCE. The large numbers of wealthy burials situated along the coasts point to the benefits accrued from access to the maritime trade.

Although increasing inter-regional contact during this period clearly had both an ideological and structural impact on Lingnan, the objects, knowledge and ideas associated with such contact never fully penetrated its social hierarchies or geographical space, with many novel elements of interaction restricted to high-status contexts centred on coastal or riverine settings but absent from many inaccessible mountainous areas. Together with such limited penetration, the likelihood that many 'exotic goods' of distant origins entered Lingnan dissociated from their original meanings and functions underscores the fact that inter-regional homogenization remained limited in scope and depth. Interestingly, it may be that many of those objects and traits often identified as markers of globalization – exotic goods from afar and high status objects – contributed little to the process of inter-regional homogenization, in contrast to the more common and widely distributed objects whose production and use were apparently free of elite control. Of course, Lingnan's location to the immediate south of Han China would have favoured the unimpeded transfer of such objects to the region's inhabitants. On the basis of such findings, we therefore propose that the process of inter-regional homogenization is facilitated when the elements of interaction adopted by a recipient system: (1) are present in sufficiently large numbers (produced at the source and/or widely copied locally); (2) enjoy widespread social and spatial penetration; and (3) maintain their original functions and meanings.

The evidence presented in this chapter points to an understanding of Lingnan as one of multiple participants in a vast space whose shared elements indicate the early stages of inter-regional homogenization. Furthermore, the significant spatial and social unevenness of this early instance of homogenization, combined with the likely loss of meaning or function experienced by many of the distant elements of interaction as they entered Lingnan, underscores the need to provide as thorough as possible a depiction of the relevant mechanisms and outcomes of inter-regional interaction. Attempts at applying the 'globalization' label to specific instances of early interaction do not in my opinion meet the challenge of representing this complexity. More specifically, it may be best to speak not of the sudden incorporation of a region into a broad globalized space, but rather of the spatially, socially and temporally uneven 'infiltration' of individual currents of interaction, each penetrating the recipient region at specific entry points, or more diffusely across a wider spatial and social front. In this view, the emergence and maintenance of cultural similarities between the source and recipient societies come to depend in large part on the nature and magnitude of the totality of such currents of interaction. I would argue that although the process of inter-regional homogenization – as it applies to Lingnan – certainly accelerated during the period discussed in this chapter, it remained incomplete until fairly recently.

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5.6

Global dynamics in local processes of Iron Age Inner Asia

Bryan K. Miller and Ursula Brosseder

Introduction

Many analytical paradigms argue that as particular regions or cultures become intensely engaged in networks of external exchange or entangled with goods and ideas from outside, inter-regional interaction leads to inter-regional integration. This is often constructed as peripheral societies incorporated into a systematized network of dependencies controlled by a dominant core society (Wallerstein 1974; Schortman and Urban 1992, 1994; Frank 1993; Chase-Dunn and Hall 1997; Wilkinson *et al.* 2011), or sometimes merely as peer societies participating in an increasingly homogeneous and, eventually, amalgamative assemblage of material expressions and practices (Caldwell 1964; Dalton 1975; Renfrew and Cherry 1986; Schortman 1989; Hayden and Schulting 1997). Although such processes and configurations indeed occur, these models do not account for instances in which intense inter-regional interactions and exchanges do not engender systemic inter-regional integration or cultural convergence. Archaeologists have thereby begun turning to theories of globalization to help explain local cultural alterations inundated with foreign elements in the contexts of non-amalgamative, cross-cultural transmissions and exchanges (Morris 2006; Pitts 2008; Hodos 2010).

Globalization denotes a swathe of local changes that occurs among persistently distinct cultures and discrete socio-political entities that are nevertheless entangled in intense networks of inter-regional exchanges. Early theorists of modern globalization argued that goods, styles, and technologies, regardless of their origins, might flow between distinct societies and cultures without amalgamating them (Appadurai 1996; 2000; Brumann 1998; Wilk 1998; see Feinman this volume). Local groups often differentially select and consume globally distributed material elements according to local cultural logics (Stahl 2002; Hodos 2010; Jennings this volume). Global-scale inter-regional interaction thereby creates a large and diverse matrix of distinct social entities, often not in contact, that draw upon the same cornucopia of cross-cultural materials and technologies but in very different ways. Global elements constitute prestigious augmentations that pervade local material traditions in the service of local politics yet without altering principal local practices. While such inter-regional material elements may reify long-distance networks of exchange, their consumption within various regions helps reinforce not inter-regional social cohesion, but local cultural distinctions and social hierarchies (Helms

1993; Schortman *et al.* 2001: 313). Intercultural exchanges and foreign elements thus are not necessarily 'transformative' cultural forces (Maran and Stockhammer 2012) but may rather constitute selected sources exploited in the reinforcement of local social distinctions and structures (Helms 1993; Brumfiel 1987; Schortman *et al.* 2001; Hodos 2010; Galaty 2014).

In this chapter, we seek to redress the use of globalization theory in archaeological research through a study of cultural transmissions and cultural changes in the realms of the Xiongnu steppe polity of Late Iron Age Inner Asia (second century BCE–second century CE). We argue that while (1) intensified inter-regional interactions *within* Inner Asia during the early Xiongnu era appear to have engendered unifying cultural expressions, (2) intensified inter-regional interactions that reached *beyond* Inner Asia to neighbouring realms as well as pan-Eurasian exchanges during the late Xiongnu era did not engender a unifying 'global culture' (cf. Hannerz 1989) of East Asia, much less of Eurasia, but rather served to simultaneously reinforce social hierarchies *within* Inner Asia and to exaggerate distinctions of the Xiongnu realm and of its purported cosmopolitan rulers. Therefore, although inter-regional interconnectivity in some instances may correspond to an interaction sphere of peer societies and lead to unifying assemblages of 'salient affiliation' (Caldwell 1964; Renfrew and Cherry 1986; Schortman 1989; Hayden and Schulting 1997), inter-regional interconnectivity in other instances, and in this case on an even larger scale, may herald the convergences of cultures that exacerbate inter-regional cultural distinctions and the cross-cultural exchanges that contribute to intra-regional social changes – a suite of processes akin to globalization. Through a consideration of the foreign elements and material culture changes in the later era of the Xiongnu steppe polity, we equate globalization to intense, yet non-amalgamative processes of inter-regional interaction that nevertheless play significant roles in intra-regional social, cultural, and political developments.

Material exchanges and cultural changes in Inner Asia

Technologies and materials spread widely throughout Eurasia long before the first millennium BCE (Wilkinson *et al.* 2011). But contrary to traditional perspectives of pre-historic Eurasia (e.g. Frank 1993), these inter-regional flows do not appear to have heralded any supra-regional singular cultures or unified realms. Yet during the Late Bronze to Early Iron Ages, weaponry and ornamentation of particular geometric and animalistic styles pervaded the steppes within Inner Asia and eventually materialized a pan-regional vocabulary of so-called steppe identity (Shelach 2009). Then, by the Late Iron Age (i.e. the end of the first millennium BCE), intensified interaction transformed these equivalent material vocabularies into a uniform assemblage of status items, and Inner Asia began to coalesce into a distinct sphere of interaction with a pan-regional material culture.

These changes occurred at the same time as historical records attest to the emergence of an immense Inner Asian polity known as the Xiongnu. At the advent of the second century BCE, a powerful clan and its charismatic leadership restructured political hierarchy among a core group of steppe nomads and launched conquests that asserted authority and rulership over the entirety of Inner Asia (Di Cosmo 2002), claiming that all groups within those realms were 'of the Xiongnu' (Sima Qian 1959: 2896). As supra-regional elites solidified an expanded hierarchical network and exerted control over the steppes during the second and first centuries BCE, identical vessel traditions and prestige assemblages, seen most prominently in belt ornamentation, spread throughout the regions of Inner Asia (Figure 5.6.1). Within the sphere of Inner Asia, both competitive and cooperative intense interactions facilitated the flows of items and ideas that engendered a widespread material assemblage expressing participation within a broader, integrated socio-political network. The materialization of a unifying supra-regional culture within this

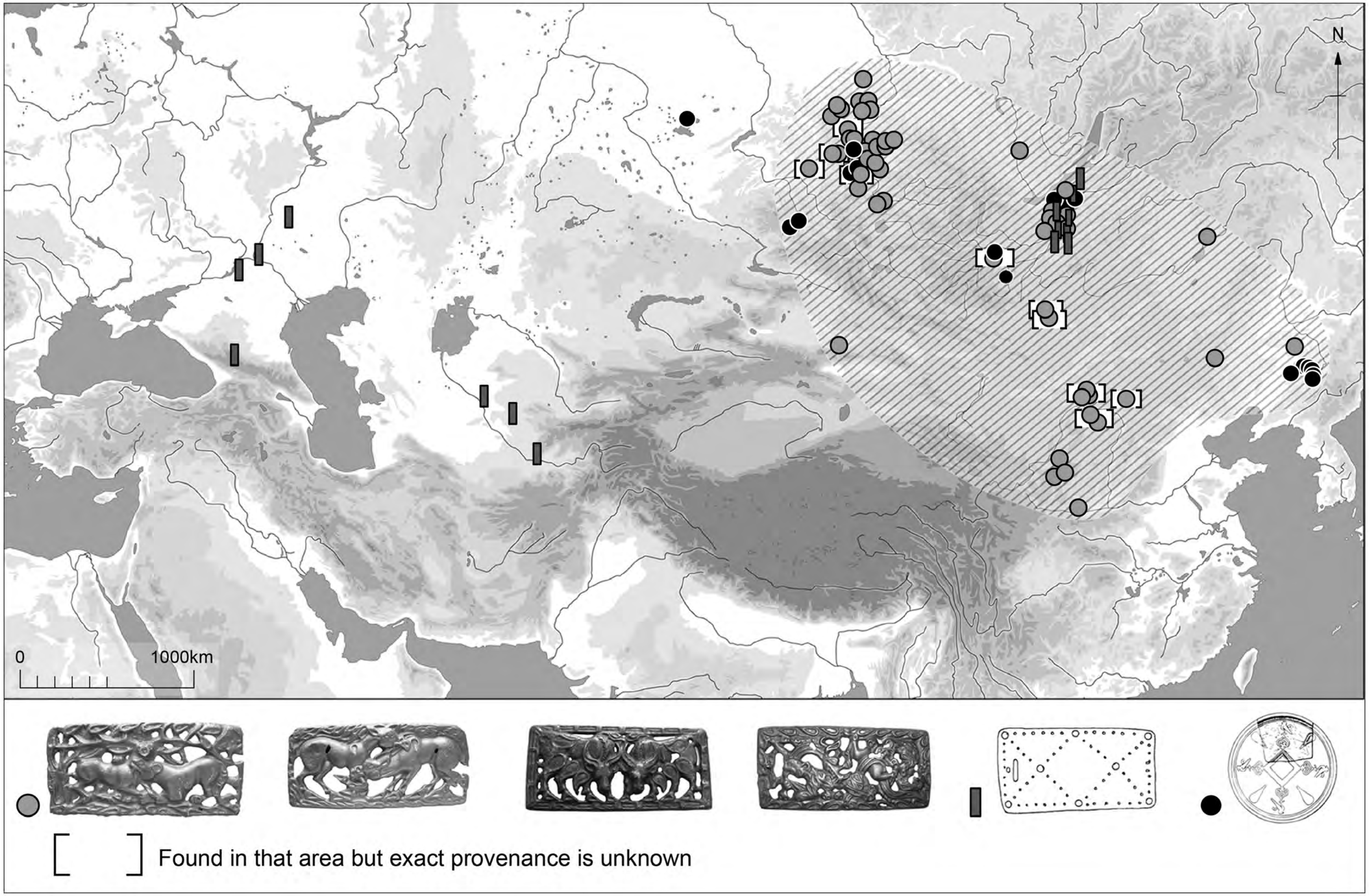

Figure 5.6.1 Early Xiongnu era remains of Inner Asia; Xiongnu cultural sphere (shaded area); distributions of bronze open-work belt plaques, stone belt plates, and imported Chinese mirrors; and archaeological sites mentioned in text; (1) Dyrestui; (2) Daodunzi; (3) Terezin (map and photographs by Brosseder)

sphere of inter-regional interaction was surely fostered and exploited by coalescing elite factions that promoted inter-regional interaction for their own benefit (cf. Dalton 1975; Renfrew and Cherry 1986; Hayden and Schulting 1997). The Xiongnu elites clearly cultivated expressions of salient affiliation that served as the means for intergroup communication and even cooperative action (cf. Schortman 1989) and that may be considered the foundations of a supra-regional political culture of the nascent steppe polity.

This 'high culture' of power (*sensu*) (Baines and Yoffee 1998), manifested in a consistent set of prestigious personal ornamentation, spread throughout the regions of Inner Asia attributed in the historical records to the Xiongnu empire (Figure 5.6.1), allowing for a tenable ascription of this material culture to the Xiongnu polity and all levels of its elite factions (Brosseder and Miller 2011). The most significant components of this political culture of prestige were the belt ornamentations, which in the early era of the Xiongnu were dominated by large rectangular plaques and broad rings (Figures 5.6.1 and 5.6. 2). These occurred either in thick stone, with linear geometric patterns on the plaques, or as openwork bronze ornaments, with intricate swirls, geometric patterns, or animal combat scenes (see Brosseder 2011). Belts were further embellished with an array of beads, small bronze ornaments, and cowrie shells (real and imitation), and occasionally Chinese bronze coins. While geometric-patterned stone plaques and the general custom of openwork belt ornamentation spread throughout central Eurasia during the late first millennium BCE, elites of the regions within Inner Asia donned identical bronze plaques with horses, wolves, cattle and even griffins (Figure 5.6.1). These constituted not merely an equivalent vocabulary of steppe-style décor and motifs, but whole sets of identical items of personal adornments that served as portable, prominent, and potent demonstrations of affiliation with an integrated network of inter-regional elites (Schortman 1989; DeMarrais *et al.* 1996). Rather than postulate a singular locale for the emanation of styles and customs that diffused into peripheral groups, we may entertain notions of a congealing interaction sphere (Caldwell 1964; Dalton 1975), in which competitive interactions and endeavours of legitimization led to the creation of a supra-regional elite culture (Renfrew and Cherry 1986; Baines and Yoffee 1998; Parkinson and Galaty 2010: 16–17).

Despite the homogeneous nature of the prestige assemblage and vessel traditions, however, different local rites and ritual arenas appear to have persisted. Although offerings of heads and hooves of livestock proliferated among the burials of Inner Asian steppe groups, the placement of these offerings, the burial structures and furnishings, as well as orientations and treatments of the body, differed greatly (Figure 5.6.2). Graves in the north-western region of the Xiongnu realms were mostly small stone cists, with flexed interments of individuals (Figure 5.6.2:11). Most burials in the far south, near the edge of the Chinese realms, were earthen pits with ledges for animal and vessel offerings and side-chamber niches for the deceased (Figure 5.6.2:7). Burials within the steppes of central Mongolia and Transbaikalia, on the other hand, were mostly simple shaft pits with stretched supine individuals in rectangular coffins and animal offerings placed immediately adjacent to or within the coffin (Figure 5.6.2:1). Thus, while packages of prestige facilitated a symbolic entrainment of local magnates within a unifying culture of political power (Cohen 1981; Renfrew and Cherry 1986; Schortman *et al.* 2001; Quast 2009), beneath the veneer of a Xiongnu political culture, parallel practices of local social distinctions remained equally as robust.

A 'synthetic and accommodating' political culture may have initially functioned as a sufficient strategy for the steppe empire (Honeychurch and Amartuvshin 2006: 276), yet splintering political crises in the first century BCE soon escalated among the high ranks as well as local constituents of the Xiongnu, prompting significant social and cultural changes within the steppe empire. Peripheral groups began to break off in greater numbers from allegiance to

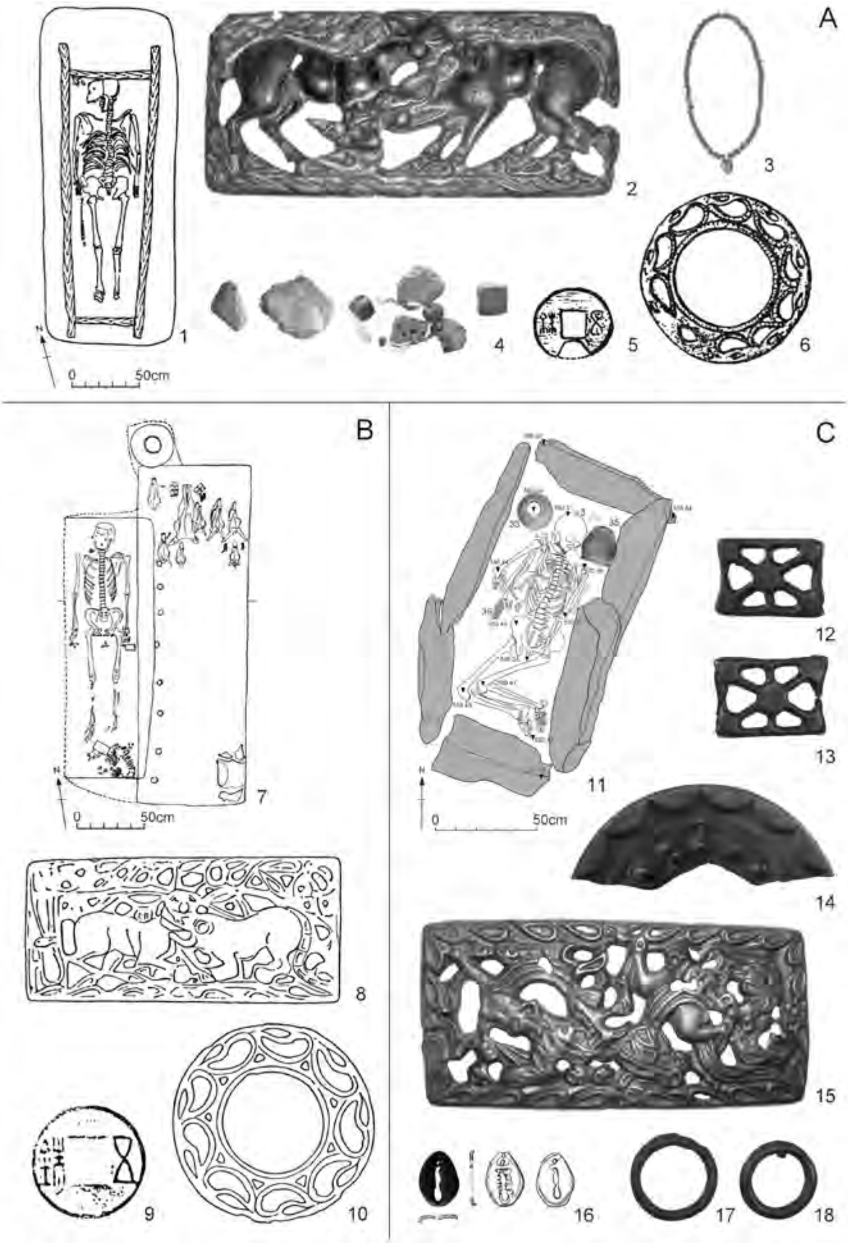

Figure 5.6.2 Selected elements of early Xiongnu era graves and inventories: (A) Grave 102, Dyrestui, Buriatia, Russian Federation (after Minyaev 1998; Minyaev/Davydova 2008); (1) shaft pit with wood coffin; (2) bronze belt plaque; (3–4) beads of different materials; (5) Chinese bronze *wuzhu* coin; (6) bronze belt ring; (B) Grave 13, Daodunzi, Ningxia, China (after Ningxia *et al.* 1988) (7) catacomb pit with side-niche burial; (8) bronze belt plaque; (9) Chinese bronze *wuzhu*); (10) bronze belt ring; (C) Terezin, Tuva, Russian Federation (after Leus 2011, reproduced with permission) (11) stone cist with flexed burial; (12–13) bronze belt pieces; (14) Chinese bronze mirror fragment; (15) bronze belt plaque; (16) bronze cowrie shell imitation; (17–18) bronze belt rings

the Xiongnu polity, and provincial clans and local leaders outside the ranks of the recognized imperial steppe aristocracy challenged the central lineages and acted on claims of supreme authority (Miller 2014). The potential for further factional competition within the large political entity (cf. Brumfiel and Fox 1994) thereby compelled supra-regional Xiongnu elites to instigate drastic changes in prestige systems and ritual practices at the turn of the millennium (Miller 2014). Local variances in mortuary practices between regions of the Xiongnu polity were soon replaced by more systematic and standardized ritual arenas, and prestige assemblages began to emphasize material elements of, and connections with, regions outside the Inner Asian steppes.

At the same time, inter-regional exchanges leapt to new scales of breadth and intensity across Eurasia, in a manner equivalent to the globalization process outlined by Appaduarai (1990), and prestige systems of the Xiongnu in Inner Asia began to alter the technologies and styles of their material assemblages accordingly. Exotic goods from outside Inner Asia already existed during the Early Iron Age, and even in the early era of the Xiongnu, seen in occasional findings of silks, mirrors, and, most frequently, coins from China. Networks of long-distance exchange were clearly present before the turn of the millennium, but the materials indicative of them were limited to the most ostentatious graves. It was not until the late first century BCE that an explosion in the variety and abundance of exotic goods and styles spread across Eurasia (Brosseder 2015) and assumed more prominent roles in Inner Asian cultural assemblages. Only in this later era of the Xiongnu do we see processes of heightened global material exchanges coupled with drastic local cultural changes that modern sociologists would accord with globalization.

By the turn of the millennium, material spreads that were previously more-or-less limited to eastern Asia suddenly expanded further and in greater quantities across the continent (Figure 5.6.3). In the late first millennium BCE, Chinese bronze mirrors, for example, seem only to have spread into Inner Asia and other areas around China, but by the late Xiongnu era several different styles of Chinese mirrors had spread throughout numerous sites of Inner Asia and dispersed as far as the western edges of Eurasia. Lest we begin to speak of pan-Eurasian flows in terms of a vast sinocentric ecumene, we must acknowledge the drastic differences in local selections and consumptions of Chinese exotica, the varied local social dynamics, and the concurrent flows of prestigious items and styles from western Asia that pervaded prestige systems of various regions and cultures of the Eurasian steppes. The closer analyses of examples of Chinese materials in this chapter serve to demonstrate that the influx of Chinese materials into the Xiongnu realms was not a development of 'Sinicizing' transformative cultural forces, but rather part of a much larger process of global-scale intensified flows across many regions and between distant societies.

It is amidst this milieu of intensified flows of foreign elements across East and Central Asia that drastic social and cultural changes occurred within Inner Asia. By the end of the first millennium BCE, the practices of straight-shaft pit graves with wooden (or sometimes stone) coffins, as well as the predominantly north facing stretched body positions, that existed in Mongolia and Transbaikalia took precedence throughout the regions of Inner Asia attributed to the Xiongnu polity (Figures 5.6.4:12–13). In addition to these more standard Xiongnu interments with circular stone ring demarcations, there suddenly appeared cemeteries with large stone-lined square mounds, trapezoidal entryways, deep pits, and log chambers surrounding wooden plank coffins (Figures 5.6.4:1–2). These tombs combined burial techniques of monumentality from China, Mongolia, and South Siberia and most likely were reserved for the uppermost echelon of the Xiongnu elite (Konovalov 2008; Brosseder 2009). The political culture of the Xiongnu empire had transformed into something more conformative and restricted.

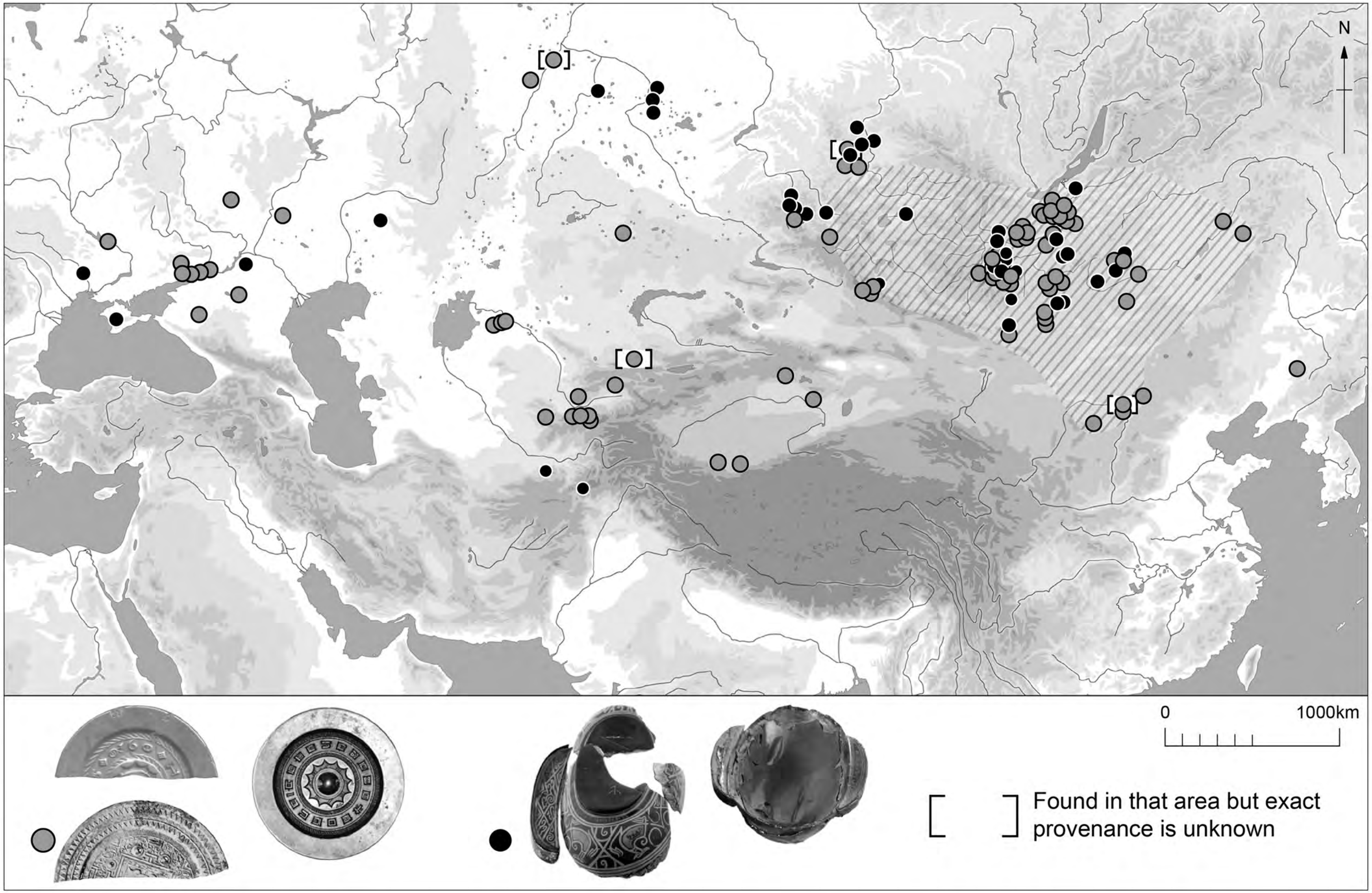

Figure 5.6.3 Late Xiongnu era remains of Inner Asia: Xiongnu cultural sphere (shaded area); distributions of Chinese lacquers and mirrors; and archaeological sites mentioned in text: (1) Noyon Uul; (2) Gol Mod; (3) Shombuuzyn Belchir (map and photographs by Brosseder)

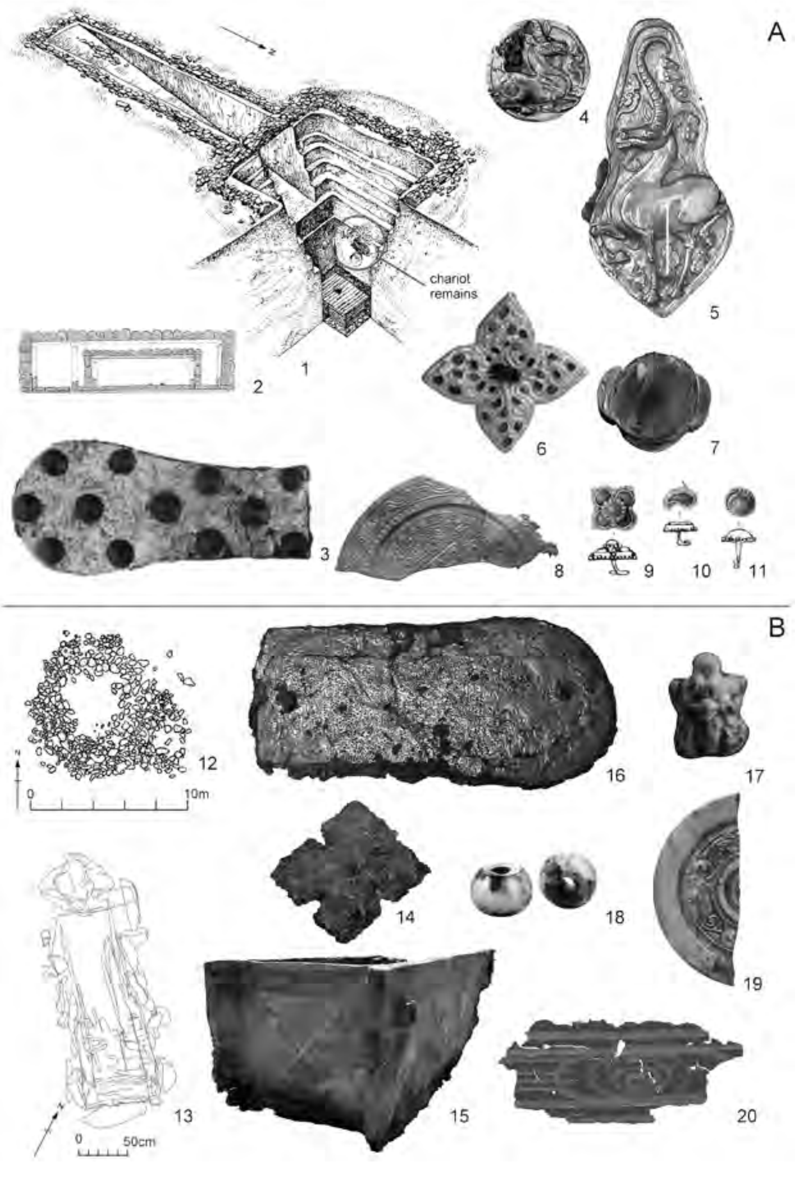

Figure 5.6.4 Selected elements of late Xiongnu era graves and inventories: (A) Square Tombs; (1) ramped pit of tomb 20, Noyon Uul, Töv, Mongolia (after Polosmak *et al.* 2008); (2) log chamber with wood plank coffin; (3–11) objects for conspicuous consumption typical for square tombs (after Eregzen 2011; reproduced with permission); (3) gilded iron belt claps; (4–5) silver foil covered iron horse plaques; (6) gilded iron coffin decoration with turquoise inlays; (7) Chinese lacquered ear-cup; (8) Chinese bronze mirror fragment; (9–11) gold jewelry with turquoise inlays; (B) Circular Grave cemetery of Shombuuzyn Belchir, Khovd, Mongolia (after Miller *et al.* 2011); (12–13) circular grave marking and shaft pit with wood coffin; (14) iron coffin decoration; (15) wood plank coffin with painted design; (16) gilded iron belt clasp; (17) Egyptian-style phallus faience bead; (18) gold-infused glass beads; (19) Chinese bronze mirror fragment; (20) Chinese lacquered vessel fragment. (Figures 12–20: copyright Miller)

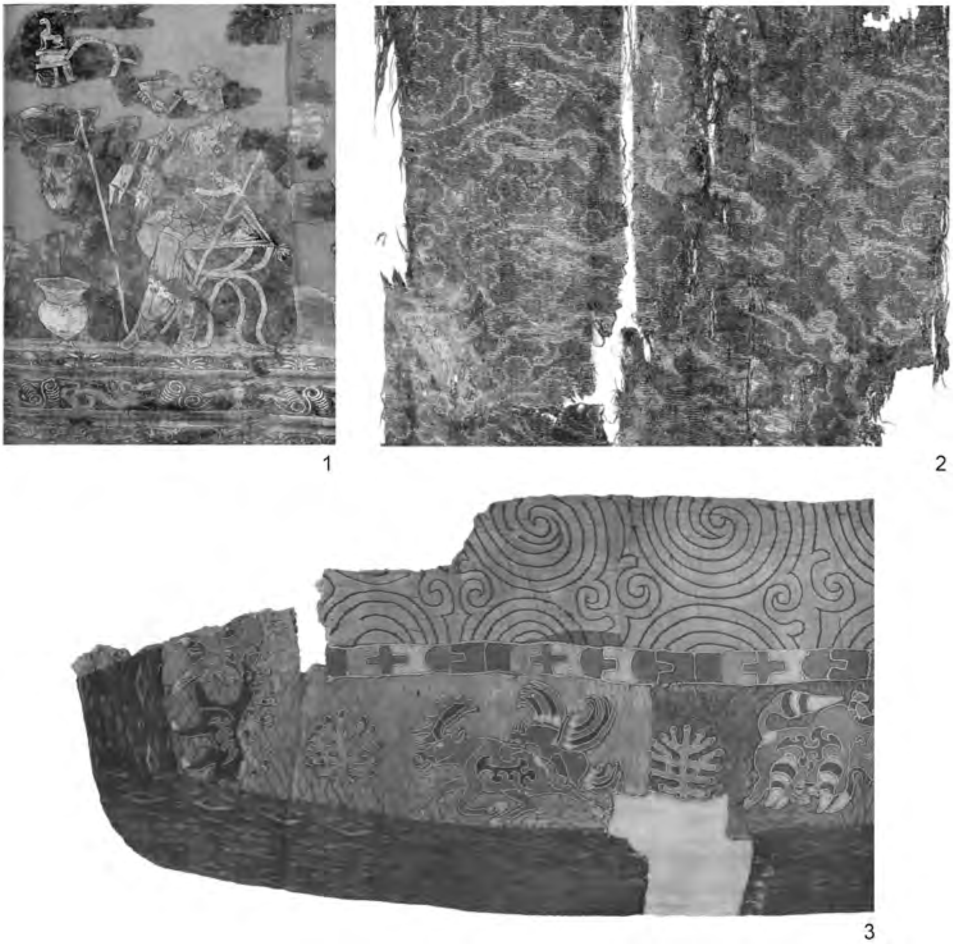

Figure 5.6.5 Textiles in late Xiongnu era square tombs at Noyon Uul, Töv, Mongolia: (1) Greco-Bactrian-style tapestry (after Eregzen 2011: 253, figure 383; reproduced with permission); (2) Chinese patterned silks (after Eregzen 2011: 246, figure 376; reproduced with permission); (3) felt carpet with silk trimming and design of griffin attacking reindeer (after Eregzen 2011: 263, figure 376; reproduced with permission)

In synch with these drastic changes in ritual arenas, prestige systems of the Xiongnu became more predisposed to far-distant exotica than to exclusively steppe-style expressions of power. The geometric patterns, animal combat motifs, and bronze openwork techniques of the early Xiongnu era gave way to an emphasis on exotic themes, placing fantastic foreign figures and motifs alongside steppe ones, and a use of iron plates covered in gold (or silver) foil, sometimes adorned with precious stone inlays (Figures 5.6.4:3, 5.6.4:6, 5.6.4:16). Some of the more rare and elaborate decorative plaques evidence creations of hybrid objects that intermixed steppe themes and manufacture techniques with foreign stylistic and technological traditions (Figures 5.6.4:4–5; Miller and Brosseder 2013). Assemblages of beads in elite graves were increasingly pervaded by gold-infused glass, multi-coloured glass, faience, and turquoise-inlaid gold pieces – all indicative of heightened exchanges with western Eurasia (Figures 5.6.4:9–11, 5.6.4:17–18; Brosseder 2007). Textiles in the monumental tombs included Chinese patterned silks, steppe-style felt carpets, and Greco-Bactrian style tapestries from central Eurasia (Figure 5.6.5). Chinese elements constituted the largest portion of imports: with Chinese lacquered cups and bowls buried along with Xiongnu-style storage jars and cook pots, and Chinese mirrors and silk fragments pervading all levels of Xiongnu interments.

Most models of culture contact and cultural diffusion would equate such a sudden prevalence of exotic goods and styles with processes of inter-regional integration disseminating from an exterior cultural force. However, a paradigm of globalization presents an analytical framework of decentralized exchanges amongst distinct social entities and, more importantly, foreign-exploitative yet locally driven culture change. Historical records attest to a drastic increase in Chinese tribute to the Xiongnu rulers during the later era of the steppe empire (Yu 1967: 40–64), and archaeological remains of the late Xiongnu era demonstrate a significant increase in the amount of Chinese and other foreign materials interred with the steppe elites. Yet although the influx of materials from the Han empire was certainly related to Chinese economic policies and cultural politics, the cultural changes that occurred within Xiongnu society were not a design, or result, of Chinese agendas. The following analysis of Chinese materials that spread across Eurasia and within the Xiongnu realms serves to demonstrate the broad extent of globally dispersed exotic elements, the differential manners in which such elements were locally consumed, and the ways in which foreign elements contributed to culture change in Xiongnu society without integrating the steppes into a 'global (East Asian) culture' dominated by China.

Local consumptions of global exchanges in Inner Asia

The prestige system of the late Xiongnu society consisted of personal ornaments, vessels and textiles, styles and motifs, and even construction techniques that drew significantly from neighbouring China as well as regions of Siberia and western Eurasia that were far from the edges of the Xiongnu realms. Yet these new and explicitly foreign components heralded neither gravitation toward Chinese culture (Yu 1967: 209; Zhang and Zhang 2003) nor the creation of a unifying Eurasian global culture. Even groups such as the Southern Xiongnu, that settled within the Chinese frontier during the later centuries of the Han empire, adopted strategies of cultural politics that sought to negotiate their presence as an independent entity along the frontier between empires rather than become subsumed by the Han social and political sphere (Miller 2015). We therefore argue for alternatives to colonial or acculturative models of culture change, such as Sinicization, for explaining the heightened consumption of Chinese material elements within Xiongnu steppe society.

Patterns of exotica consumption within local contexts often demonstrate selections of particular foreign elements for augmentations of items and assemblages, not adoptions of whole packages of foreign materials for the replacement of local assemblages, and, moreover, these inclusions frequently accord with local cultural logics and serve local cultural politics (Thomas 1991; Tobin 1992). The goods that Chinese annals record as tribute to Xiongnu leaders – silks, chariots, wines, meats, grains, and other consumables and preciosities (e.g. Jia Yi 1994: 29; Sima Qian 1959: 2895) – were meant to cater to steppe preferences, and they in turn bolstered the prestige of personal adornments and social gatherings amidst local power politics. While the new cosmopolitan culture of the Xiongnu expressed Inner Asian connectivity with, and even centrality within, the various societies of the increasingly globalized ecumenes of East and Central Asia, it simultaneously served to strengthen social networks and cohesion within the Xiongnu realms. In this brief consideration of foreign inclusions, we present Chinese mirrors, vessels, and silks as categories of globally exchanged materials that were incorporated into the Xiongnu, and beyond, through local demands, logics, treatments, and agendas of consumption within the steppes of Inner Asia.

It should first be noted that emphasis within the steppes on foreign components of prestige was accompanied by a broader homogeny in ritual arenas and practices throughout Inner Asia that solidified participation in the steppe polity and developed more uniform expressions of a distinct Xiongnu identity. In addition, the development of new ostentatious monuments amplified social differentiation and elevated members of the supra-regional Xiongnu elite. It was these explicitly local (i.e. *within* Inner Asia) processes of cultural homogenization and social hierarchization, both linked to intraregional power politics of control, that were fed by the increased consumption of foreign 'global' elements. Instead of assimilating or pacifying the steppe groups, as some Chinese court advisors may have intended, the selected array of Chinese exotica accorded with local tastes (cf. Stahl 2002) and fed the prestige system and political machinery of the steppe empire (Barfield 1981: 53–56).

The incorporation of bronze mirrors from China into Inner Asian goods assemblages correlated with a long tradition of bronze mirrors, widespread not only within China but also among nomadic groups of Eurasia as early as the Bronze Age and as far as the Black Sea (Rubinson 2002). Yet the selections and treatments of Chinese mirrors within Xiongnu society differed from both China and other regions of Eurasia. Chinese mirrors of several stylistic types (*riguang*, *siru*, *guiju*) appeared in Xiongnu contexts, whereas only a selection (*riguang*, *siru*) spread to the Black Sea area. While mirrors in China, as well as in central and western Eurasia, were interred whole, Chinese mirrors in Xiongnu graves were almost always found as fragments (Figures 5.6.2:14, 5.6.4:8, 5.6.4:19). The breakage of these mirrors was part of an intentional practice, perhaps for burial rites or fractured distribution (cf. Chapman 2000), as they have often been found as fragments wrapped in textiles (Miller *et al.* 2006, 2011) or burned and broken before placing at the entrance of tombs (Minyaev and Sakharovskaya 2006). Steppe-style mirrors, although they certainly existed in Inner Asia, were rarely ever interred in graves, even though Chinese mirror fragments pervaded the elite Xiongnu burials, and were always deposited whole (Miller *et al.* 2006). Although the consumption of bronze mirrors from China in Xiongnu society accorded with local material culture traditions and pre-existing items, the imports were clearly subjected to physical and spatial treatments that distinguished them from steppe-style mirrors as well as from Chinese practices.

Similarly, the consumption of lacquered ear-cups and bowls from China matched a concurrent custom of small cups and bowls in vessel assemblages found at Xiongnu settlement sites (e.g. Pousaz *et al.* 2013). Although in the core areas of China ceramic versions of ear-cups quickly became the predominant mode of such vessels by the first century CE (e.g. Luoyang 1959; Xi'an 2009), only the more costly lacquered versions of these Chinese-style cups were found in late-era Xiongnu burials. Furthermore, while in China a vast array of lacquered vessels, and often entire sets of cups, were interred with local elites (Hong 2006), only one or two cups or bowls were found in most Xiongnu graves, and the wide array of other lacquered Chinese items did not occur in Xiongnu burial assemblages except for the rare monumental tombs. Although habitation contexts attest to the regular use of cups and bowls, like the mirrors, the Xiongnu did not tend to bury local-style serving vessels in graves. In the contexts of burials, exotic cups and bowls were found along with standard Xiongnu-style storage jars and cook pots as well as the remains of herd animal food offerings. These patterns reflect a deliberate selection of particular forms (mostly cups and bowls) and styles (lacquered) of serving vessels from China for the augmentation of local Xiongnu feasting accoutrements, as well as treatments that distinguished them from local equivalent vessels. And by the inclusion of exotic cups alongside normal steppe cooking vessels and cuts of livestock meat, the use of foreign vessels may have augmented the dishware but it did not alter the feasting practices (cf. Pitts 2008).

Silks from China were incorporated into Xiongnu material assemblages in a comparable fashion. Rather than Chinese-style garments completely replacing steppe traditions and items of dress, the exotic and luxuriant raw material was used to augment the local garb. Chinese patterned silk trimmed the fringes of felt rugs bearing steppe-style swirl motifs and griffins attacking reindeer (Figure 5.6.5:3), and silk fabric lined the interiors of fur hats or served as undergarments beneath fur and hide robes (Rudenko 1969). The consumption of Chinese silk thus did not signify the 'stripping of felt and fur' in preference for Chinese dress and customs (Honey 1992) but rather the use of an exotic raw material to remake or augment local Xiongnu forms of dress (cf. Comaroff 1996). Silk thereby represents another of several categories of foreign materials that infused Xiongnu prestige assemblages, yet did not induce significant alterations to the overall cultural traditions or practices. Instead they augmented local material practices and were often subjected to treatments that exalted and differentiated them from parallel local items.

Although an array of ostentatious items imported from China, Persia, Central Asia, and even the Mediterranean saturated burial assemblages of the large tombs of the ruling Xiongnu elite (Brosseder 2009), in the present chapter we wish to emphasize foreign materials that pervaded all levels of Xiongnu interments. Dominant factions of society often assert proscriptions for consumption of particular prestigious materials, while simultaneously encouraging the consumption of certain other exceptional materials by the rest of society, thereby creating an extensive dependency upon the uppermost echelons who control the socio-economic networks of wealth and goods (Brumfiel 1987). Although Chinese vessels made in imperial workshops were clearly limited to the monumental square tombs of the Xiongnu (Brosseder 2015), lacquered serving vessels not necessarily made in the premium workshops still permeated the strata of the lesser local elites, as evidenced by Chinese lacquered serving vessels in standard circular graves throughout the Xiongnu realms. Despite the luxuriant quality of silk fabric, remains have been found not only in the large monumental tombs, but even in the smallest of stone cists and child burials of the Xiongnu (e.g. Miller *et al.* 2011). Although the exact use of mirrors, local or foreign, is difficult to assess in the steppes, exotic serving vessels and garment materials would have been conspicuous accoutrements in social gatherings and thus surely played a prominent role in decisive interactions, exchanges, and negotiations.

Such prestigious goods may be likened to 'bulk luxuries', costly and prestigious materials that are nevertheless widely dispersed, and the broad consumption of which bolsters the power of the supra-regional elites (Kepecs 2003). Despite a dominance of Inner Asian practices and material traditions, a necessity developed within Xiongnu society to participate in global cultural expressions, not as emulations of a unifying global culture, but as demonstrations of access to profitable extra-regional networks and the maintenance of local power. Rather than accentuating steppe-themed prestige items, as elite networks had done in the early Xiongnu era, the later era ruling echelons of the Xiongnu emphasized exotic Chinese and western Eurasian materials as the primary components of prestige and thereby promoted a dependency of the lesser provincial elites on the far-reaching networks of exchange, the avenues of and access to which the supra-regional elites controlled.

It is critical to note that these foreign imports did not represent a dependency of Inner Asian steppe communities upon outside subsistence sources (Di Cosmo 1994) so much as a growing reliance, via the ruling political stratum, of the wealth finance of the polity (*sensu*) (D'Altroy and Earle 1985) upon extra-regional sources of power and prestige. Yet such developments were not restricted to Xiongnu society. Even within the Han empire, exotic imports escalated in consumption and foreign exchanges were exploited for the prominence and profit of the state

(Bang 2009; Chin 2014) as well as the elevation of the ruling elites that sought to 'dazzle' the lesser strata of Chinese society (Huan 1992: 1.3). In both the Han and Xiongnu realms, increasing consumption of globally exchanged ideas and items were encouraged and exploited by the uppermost echelons of the empires. Exotic material inclusions in Xiongnu assemblages were thus not forces of *inter*-regional sociocultural integration with East or Central Asia but rather instruments of *intra*-regional social hierarchization and cohesion within the steppe empire.

Conclusion

A wave of recent literature has rebranded models of cultural diffusion and inter-regional integration as globalization within the contexts of expanding political realms or spheres of influence (Witcher 2000; Hingley 2005; Ray 2006; Mattingly 2011; Versluys 2014). Yet such approaches run the risk of conflating globalization with processes of colonization or imperialization, which are more akin to forceful 'grobalizations' (Ritzer 2003; see also Orser this volume) than fluid globalizations. Instead, we suggest a more explicit distinction between processes of imperialization and globalization. Sociological studies of the modern era have long demonstrated that notions of a singular expanding global culture and unidirectional models of exchange severely misrepresent and misunderstand the inter-regional dynamics and local developments associated with processes of globalization (Hannerz 1989; 1990; Featherstone 1990; Smith 1990; Wilk 1998). Processes of globalization do not induce a mere homogenization of cultures or the assimilation of interacting societies (A.D. Smith 1990; Appadurai 1996; Wilk 1998; Jennings this volume). Even if widely spread elements seem to be emanating from a particular region(s), the greater realm of interacting regions is not inherently controlled by an overriding core society imposing radial diffusions of culture into peripheral regions (Appadurai 1990; Jennings 2006). Hence, modern *global*-ization is not *American*-ization, or any other core-culture '-ization,' but merely the convergence of multiple cultures, societies, and realms into a web of flows and interactions of significantly new magnitudes of breadth and intensity (Appadurai 1990). In accordance with Appadurai and other foundational scholars of modern globalization theory, we maintain that globalization in antiquity should be seen as a fluid and intense interconnectedness of disparate and distinct cultures within a large expanse of territories (Morris 2006) and entailing simultaneously shared materials and sharp cultural differences within an expanded world not of a singularizing dominant culture, but rather of many pervasive cultural regimes (Hodos 2009, 2014).

Within a globalization framework, macro-scale consumptions of similar items and ideas denote not a 'systemic' structure (Wilkinson *et al.* 2011; Feinman this volume) but rather a 'disjunctive order' (Appadurai 1990: 6) characterized by localized consumptions. A globalized world, whatever the limits of that ecumene may be, is a highly connected motley matrix of distinct local cultures that differentially adopt widespread material technologies and diversely engage with particular elements of a global material vocabulary of prestige. These elements include not only rare opulent goods consumed by the uppermost social echelons, but also widely distributed 'bulk luxuries' (Kepecs 2003) and exotic raw materials that pervade local assemblages. New foreign-imbued, yet locally negotiated and constructed, cultural contexts of interaction (Thomas 1991, 1999) comprise both the fibre of global-scale networks and a source for local social, cultural, and political change. Heightened consumptions of cross-cultural elements are thus more often driven and shaped by the social dynamics of local contingencies, which both reify broader inter-regional exchange networks and exploit them within intra-regional power politics (Orlove 1997; Brumann 1998). It is in this vein that we interpret the flows of goods and ideas that occurred between the Xiongnu realm and other distinct cultures, societies, and polities of East and Central Asia.

In the early era of the Xiongnu, interaction between areas of Inner Asia was characterized by the development of a uniform assemblage of vessel traditions, prestigious expressions, and pan-regional identity. Whole packages of prestige materials and sets of vessels were produced and consumed in equivalent fashion and dominated local assemblages throughout Inner Asia. This resembles more the model of a pervasive package of material culture, in the manner of peer–polity interaction (Renfrew and Cherry 1986) or interaction spheres (Caldwell 1964; Hayden and Schulting 1997), in which intergroup competition leads local entities to embrace equivalent sets of material expressions of prestige that in turn enable the formation of a socially unifying identity and inter-regional integration. By the later era of the Xiongnu empire, however, connectivity between Inner Asia and surrounding regions escalated and cultural elements from outside Inner Asia took precedence within prestige assemblages. Nevertheless, no unifying material assemblage developed between regions of Eastern or Central Asia with the Inner Asian realms. Although inter-regional interaction at the macro-scale of Inner Asia may have fostered sociocultural integration, inter-regional interaction at the macro-scale of Eurasia prompted neither social nor cultural cohesion. The pan-Eurasian similarities and broad distributions at the turn of the millennium were neither acculturative diffusions nor materials of an amalgamated interaction sphere. We therefore contextualize the changes in Xiongnu material culture within non-amalgamative processes of globalization rather than the exterior-driven and integrative processes of Sinicization.

Globalization theory posits intensified cross-cultural exchanges as fuelling, but not driving, local social developments (Appadurai 1996). Globally exchanged items and ideas, regardless of their various origins, become cross-cultural capital for localized change. The foreign materials that increasingly saturated Xiongnu prestige assemblages did not constitute whole sets of items that overtook or converted steppe material practices. Rather, they were prestigious augmentations from exotic realms, often beyond cultural understanding (Mol 2011), that pervaded local material assemblages in the service of local politics without revising local practices to integrate them with exterior societies. The exotic vessels, jewellery, and textiles emphasized long-distance networks of exchange that were exploited by local elites, and their consumption within Xiongnu society did not reify inter-regional social cohesion with China or elsewhere but reinforced local cultural distinctions and social hierarchies (Helms 1993; Schortman *et al.* 2001: 313). Furthermore, the dispersal of foreign bulk luxuries such as lacquered cups and silk cloth amongst the Xiongnu signals both the encouragement of exotica consumption and the more ubiquitous entanglement of local steppe communities with global exchange networks, an entanglement that fed cultural changes and social developments driven by the ruling factions of the steppe empire.

In the course of globalization processes, inter-regional interaction creates a large and diverse matrix of distinct social entities, often not in contact, that draw upon the same cornucopia of cross-cultural materials and technologies in very different ways and for various local purposes. We therefore perceive of globalization processes in antiquity in the same manner as earlier sociological studies of the modern era – as non-amalgamative inter-regional dynamics propelled forward by and differentially exploited within a large array of independent local entities. Within Iron Age Inner Asia, the changes in material culture that occurred in the late era of the Xiongnu polity are indicative not of inter-regional social or cultural integration with China or elsewhere, but rather of locally driven change and intra-regional integration that drew upon inter-regional exchanges.

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5.7

Tombs of Xianbei conquerors and Central Asians in sixth century CE northern China

A globalizing perspective

Mandy Jui-man Wu

Introduction

The concept of globalization thinking has been used for studying contemporary society (Hopkins 2002; Scholte 2005). Yet, little has been done on ancient society. What is the definition of globalization? Archaeologists agree that 'globalization is a form of connectivity'. This form of connectivity records human interactions on local and regional scales (Robertson this volume). Most historians and archaeologists agree that global systems need not be strictly inclusive of the whole world (Wallerstein1976: 346; Robertson this volume). Globalization, however, has to form the connections between different regions and has an impact on social change (Jennings 2011: 2). Furthermore, Feinman (this volume) emphasizes the importance of an historical perspective on globalization that bridges the past material world with the thinking of contemporary globalization. Within this framework, this chapter aims to provide a contextualized analysis on the outcome of the intensive globalization during the sixth century CE by examining archaeological records of the Northern Zhou dynasty (557–581 CE) in northern China.

Globalizing thinking provides a way of re-examining the theory of core and periphery (Knappett this volume), and emphasizes mobility and intra-cultural connectivity. One very important aspect is the view of all 'cultures' in 'one single cultural container', which distinguishes the study in globalization as a 'decentered phenomenon' (Versluys 2014: 12). This is a particularly useful concept, since previous scholarship about the Six Dynasties period (221–581 CE) tended to view inter-cultural contacts under such labels as 'Sinicization' or 'Xianbei-ization'. For example, Chen Yinke 陈寅恪 (1890–1969) argued that because identity is culturally constructed, non-Chinese who adopted Chinese culture were 'sinicized' (*hanhua* 汉化), while Chinese who adopted non-Chinese culture were 'barbarianized' (*huhua* 胡化) (Chen 1940). This proposition influences many Chinese scholars up until the present time. Albert Dien, in contrast, argues that during the periods of Western Wei and Northern Zhou the bestowal of Xianbei surnames to both Xianbei and Han Chinese officials was a 'Xianbei-ization' (Dien 1977). He further argues that the Xianbei retained their own identity during the period of Six Dynasties and that the Xianbei nomadic culture had a great impact on Chinese culture during the subsequent periods of the Sui and Tang (Dien 1991a). I argue that the traditional view of acculturation, either 'Sinicization' or 'Xianbei-ization', should be replaced by the concept of globalization and the emphasis should be focused on processes of connectivity in a global setting.

A brief historic background

Connections between what we now know as China and West Asia already existed during the second and the first millennia BCE, but they intensified after the imperial unification by the Qin (221–206 BCE) and Han dynasties (206 BCE–220 CE) and reached a high peak during the Tang (618–907 CE). Unlike the Han dynasty ruled by Chinese leaders, the Sui-Tang leaders and elite were of mixed ethnic background. During the period between the fall of the Han and the rise of the Sui-Tang, many short-lived dynasties ruled parts of China, and many of them were established by non-Chinese people or by people of mixed ethnic origins. Among those groups are the Xianbei 鲜卑, a pastoral people who originated from China's north-eastern frontier. One of the more important political entities established by this group, the Tuoba 拓跋, a section of the Xianbei, was the Northern Wei (386–543 CE) which ruled all of northern China. During the mid-sixth century the Northern Wei disintegrated, and the Western Wei (535–556 CE) and the Eastern Wei (534–550 CE) dynasties were established. These dynasties were controlled by two powerful military families called the Gao Huan 高欢 of Han-Chinese ethnic lineage and the Yuwen Tai 宇文泰 of Xianbei ethnic lineage. After a short period, the Gao established the Qi dynasty and built their capital at Ye (modern Cixan, Hebei). The Yuwen later declared the Zhou dynasty 周, using the name of the ancient Zhou (*c.*1046–256 BCE) as their dynastic title, and established their capital in Chang'an 长安 reusing the location of the traditional Chinese capital site.

The policies promoted by foreign leaders in northern China during the time of disunion were favourable to other foreign groups and welcomed foreign merchants (such as Persians, Sogdians, Türks, etc.) and practitioners of foreign religions (Manichaenans, Zoroastrians, Muslims, Buddhists, etc.). Cultural traditions brought in by these foreign conquerors, merchants, or religious practitioners had significant impacts on Chinese society and culture, but these foreigners also adopted some Chinese traditions. These issues will be discussed in subsequent sections.

This study highlights interactions and interactivities among these ethnic groups during the sixth century by examining two levels of connectivity: the state level (the Xianbei rulers of the Northern Zhou dynasty) and the regional level (Sogdian elites who were hired by the Northern Zhou Xianbei rulers). The Sogidans originally lived in oasis states between the Amu Darya and Syr Darya rivers in modern day Uzbekistan and Tajikistan. They were merchants, craft workers, translators, and missionaries who came to China as early as *c.*300 CE via the Silk Road (La Vaissière 2005). In Chinese historical texts, for example the *History of Northern Zhou*, Sogdians are referred to as *shanghu* 商胡 'merchant barbarians' (Linghu 1971: 913; 'barbarians,' *hu*, is not necessarily a derogatory term during this period). As people who travelled or emigrated along the trade routes, they were active in the exchange and creation of ideas and artefacts.

The sixth century marks an increase of long-distance commercial activities and the spread of world religions across Eurasia. The residue of that exchange is found in the tombs of individuals and in written texts, including epitaphs, trade documents and dynastic histories. Recent excavations from the 'Western Regions' of present-day China, where these border polities were located, have yielded a considerable amount of new information on this period. It is those new constructions of identities and legitimated power that were recreated in tomb structures and funerary goods as people encountered one another through trade, marriage and various socio-political alliances. By examining recent archaeological data from excavations of Northern Zhou tombs at the northern frontier or close to the capital of the Northern Zhou, modern Xi'an, China, this chapter provides a case study on temporary and spatial connections in local, regional, and global scales. It discusses the important globalizing processes that took place during the sixth century.

Foreigners of the Northern Zhou dynasty

As discussed above, the Northern Zhou leaders reused ancient Zhou as their dynastic title and took on the ancient Zhou bureaucratic system. However, this was a militarizing culture. Yuwen Tai, a Xianbei warrior who was posthumously honoured by a bestowal of the title Emperor Wen of the Northern Zhou, created a military organization known as *fubing* 府兵. This was a type of militia modelled on the nomadic tribal organizational systems (Chen 1937: 275–86). The *fubing* organization was established in 542 CE and recruited members from several powerful local Chinese families (Dien 1991b). Yuwen Tai was aware of the dissatisfaction of the Xianbei population with rapid adaptation of Chinese customs by the previous dynastic rulers of the Northern Wei, thus he restored Xianbei surnames. He also bestowed Xianbei surnames on Chinese military leaders and administrative officials (Dien 1977). The restoration of Xianbei heritage served to consolidate military power under the ruling Yuwen family, but at the same time improved the integration of the Chinese elite into the military system.

The Xianbei rulers of Northern Zhou not only recruited local Chinese military leaders, but also hired Sogdians to work for the Northern Zhou government. The official titles of *sabao* 萨保 and *datainzhu* 大天主 were bestowed by the Northern Zhou government on the Sogdians. Although these titles were not recorded in Northern Zhou written texts, they were documented in funerary epitaphs and later written texts, such as the *History of Sui Dynasty*. Scholars have extensively studied the title of *sabao* and there is general agreement on their significance. The title of *sabao* was derived from the Sogdian term *s'rtp'w*, originally from the Sanskrit word *sarthavaha* and meaning 'the leader of merchants' or 'the caravan leader' (Dien 1962). The *sabao* was a leader of Sogdian group who managed political and religious business in the Western Region (Rong 2001). The Sogdians were also envoys to the Türk empire as the representatives of the Yuwen government, according to the *History of Northern Zhou* (Linghu 1971: 908). Furthermore, Sogdians functioned as military officers who were stationed at the frontiers. Sogdian leaders played multiple roles in the Northern Zhou government and those characters were depicted on funerary furniture; for example, the illustrated funerary couch in the tomb of An Jia 安伽.

Analysis of archaeological data

During the past thirty years, archaeologists excavated seventeen tombs dating to the Northern Zhou period (557–581 CE): seven Xianbei, four Chinese with Xianbei surnames, three Sogdians, two Han Chinese, and one Indian Brahmin. These tombs were found in three different locations: three Sogdian tombs near Xi'an, the capital of the Northern Zhou; nine tombs at Xianyang Shaanxi, part of the royal cemetery of the Northern Zhou; and three tombs at Guyuan, Ningxia, an important military station on the trade road (Figure 5.7.1). Among these seventeen tombs, eleven were pillaged, but a significant number of burial goods remain in the tombs allowing for analysis and comparison (Wu 2010). In this section, I describe physical aspects of the burials, such as structures of tombs, murals painted on their walls and types of grave goods found within them. This description will give the reader a general understanding of the evidence and will form the basis of my discussion in following sections.

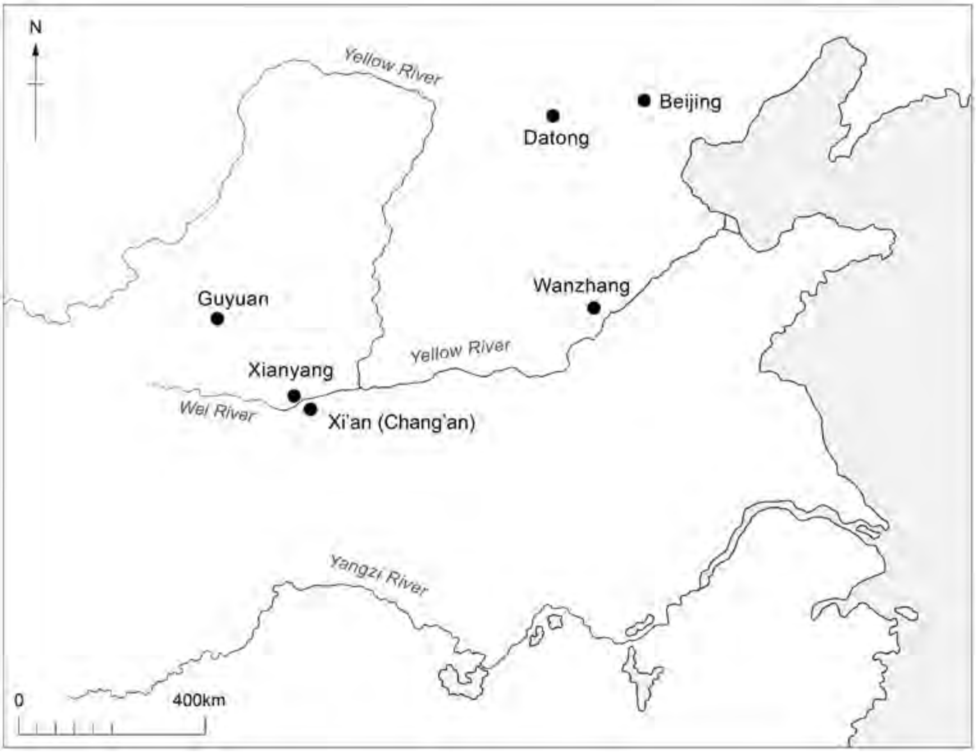

Figure 5.7.1 Location of the Northern Zhou tombs

Tomb structure

The structure of the Northern Dynasties (386–589 CE) tombs generally consists of a long sloping passageway, airshafts, an antechamber and a main chamber. The overall spatial structure of the tombs of Xianbei elites is similar to that of aristocratic Chinese burials during this period. Studies have shown that the overall size of the tombs and the number of airshafts and niches within them is strongly associated with the social rank of the deceased during the Northern Zhou period (Yun 1993: 172–73). Yet, there are some exceptions. The largest currently known tomb of the Northern Zhou is not the tomb of Emperor Wu. Although the tomb structure of Chiluo Xie 叱罗协 was similar to that of Emperor Wu, the length of his tomb (71 metres long) is longer than that of the Emperor (68 metres) and the number of airshafts (six in his tomb) is one more than those of the Emperor's tomb. The tumulus of Chiluo Xie is about 20 metres in height, which is the highest among the Northern Zhou tombs.

The use of niches found at Chiluo Xie tomb is, however, a non-Chinese burial custom, which came from the northern frontier (Wu 2010: 39–42). According to his epitaph and the biography of the *History of Northern Zhou*, Chiluo Xie had fought in many battles with Yuwen Tai, the founder of the Northern Zhou, and helped with the establishment of the state (Linghu 1971: 177–81; Yun 1993: 32). The larger tomb size of Chiluo Xie likely indicates his high military status. This in turn suggests that a warrior could have a larger tomb than the emperors, but only under special circumstances.

The structure of the three Northern Zhou Sogdian tombs is similar to that of Northern Zhou tombs. Tomb length, size and shape seem to have been determined not only by the owner's social status, but also by the owner's wealth. The *sabao* of the local state owned 2,000 households and their political status equalled that of the seventh-ranking officials at the county *or xian* 县 level. Although the official ranking of *sabao* equalled that of a seventh-ranking local official, it had never been included in the official bureaucratic system because Sogdians were still regarded as uncivilized (Su 2005: 15–21). It is possible that the leaders of the Northern Dynasties created a newly tailored position for the Sogdians, since these positions were not derived from the Chinese institutionalized system but named after the title of their leaders.

Murals in Northern Zhou tombs

Murals reflecting belief systems were commonly painted on walls of Chinese tombs in the Eastern Han period (25–220 CE). Such murals sometimes reflect burial rituals carried out in specific areas of the tombs. It was believed that they aided in transporting the deceased between this world and the next. These practices and beliefs differed among social classes and changed over time. For example, the murals found in the tombs of Northern Qi in the passageway and chamber generally consisted of two registers: the upper register is marked by sacred animals (a dragon, a tiger and a phoenix), as is common in Chinese tombs, and guardian spirits, and the lower register depicts scenes of ritual processions. Northern Qi murals often combined elements of this world, the afterlife and the cosmos (Yang 2000: 71–73). There is little evidence of the relationship between these murals and ritual practice in the Northern Zhou tombs.

No murals were found in the tomb of the Northern Zhou Emperor Wu, but the walls of some tombs of high-ranking Northern Zhou generals were painted with murals. Unfortunately, the subject matter cannot be determined because of their poor preservation. All that remains are broad bands of red and/or black that were painted in the passageways and in the chambers (Zheng 2002: 130–37). Those with better preserved murals belonged to four generals: the tombs of Li Xian 李贤, Tian Hong 田弘, Yuwen Meng 宇文猛, a Chinese bestowed with a Xianbei surname, and An Jia, a Sogdian with a military title. The murals in these four tombs all have a broad red band and standing guardian figures on the walls in the passageway as well as in the burial chamber. The murals in the tomb of Li Xian are in the best condition. Two standing guardian figures on each side of the passageway are especially well preserved. Warrior figures were also painted on the first and second tunnel walls. Although the clothing and posture of the warrior figures differ slightly from each other, most are holding a weapon such as a sword or a knife with a curved handle. The subjects of murals on the wall of Northern Zhou tombs may be associated with their military position.

Images of fire ritual scenes only appeared in the three Northern Zhou Sogdian tombs, which were only recognized by certain groups of people, such as Sogdians or Zoroastrian believers. In An Jia's tomb, the panel of scenes of a Zoroastrian funerary rite was placed above the tomb entrance, a liminal space that precedes the inner chamber. The inner chamber was the space that in Chinese customs was the solemn indicator of death and the location of interment. Here, however, the style and iconography on the panel are clearly not Chinese in inspiration. Located on a lotus platform are three dorsally placed camels, with an altar of fire rising from their backs (Figure 5.7.2). This scene is a depiction of a ceremony that was part of the Zoroastrian funerary rite and would have been performed by the birdmen depicted on the relief on An Jia's behalf (Grenet *et al.* 2004: 273–84). This scene suggests that the rite was intended to highlight Zoroastrian concepts about death and the passage of the soul following death. A similar scene of a Zoroastrian fire ritual is depicted on Shi Wirkak's (Shi Jun 史君 in Chinese) sarcophagus.

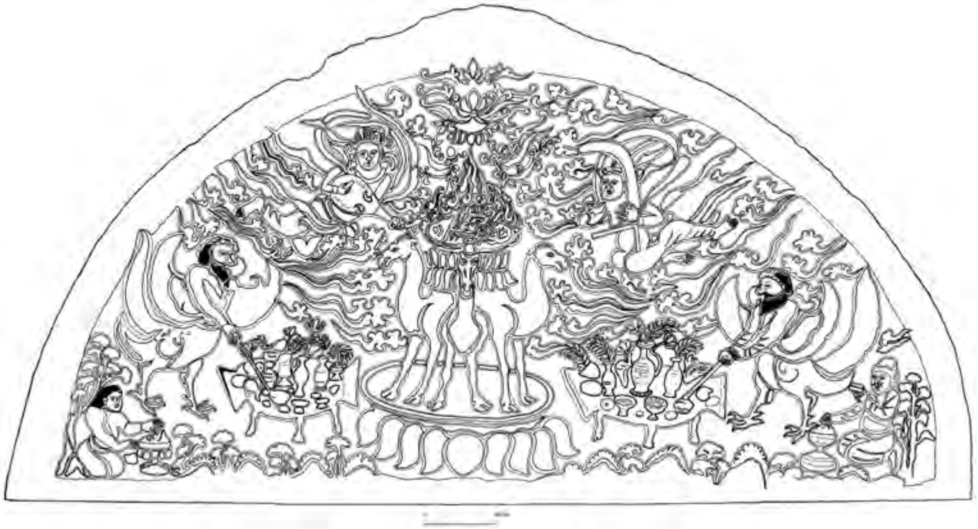

Figure 5.7.2 Priest-birds on the stone tympanum above the doorway of tomb of An Jia (after Shaanxisheng Kaoguo Yanjiusuo 2003: figure 13)

A masked half-man and half-bird figure of a Zoroastrian priest, holding a stick to a fire altar, was placed to the left and right end directly below the front wall of the sarcophagus. Both fire altar scenes in An Jia and Shi Wirkak's tombs show a priest-bird lighting the fires, which is a depiction of the Zoroastrian ritual.

Patterns of use of burial goods

Pottery objects

Pottery was the most common Chinese burial good and had been used since the Neolithic period. Pottery goods are found in imperial tombs (usually figurines and pottery models of household goods and tools) during the Han dynasty (206 BCE–220 CE) and these continued to be used in elite burials during this period. Though the types of pottery objects are similar to those of the Han period, the style became much more realistic (Dien 2007: 218). In the tomb of Emperor Wu and his consort, 181 pottery objects were found in the four small niches in the passageway leading into the main chamber. These include figurines, ceramic vessels, and models of household goods and tools. Compared with the imperial tomb of the neighbouring state, the Northern Qi imperial tomb of Wanzhang 湾璋 contained 1805 pottery objects, some ten times the number of artefacts found at the tomb of Emperor Wu. Similarly, the numbers of pottery objects in other Northern Zhou tombs is relatively low. This may suggest that pottery objects were not valued highly in Northern Zhou society.

Jade objects

Jade objects were highly valued grave goods in Chinese tombs of the social elite from as early as the Neolithic period. Large numbers of jade objects were found in tombs from the Neolithic and up to the Han dynasty, but only a few were found in the tombs of the Northern Zhou or Six Dynasties. Remarkably, in the tomb of Emperor Wu, one large, thick jade *bi* disk, 29.5 cm in diameter and 1.2 cm thick, and wrapped with a red textile was found in the east wall niche, and four jade pendants were found in the west wall niche. Furthermore, the tomb of the brother of Emperor Wu, Yuwen Jian, also contained two jade *bi* disks.

Bronze vessels

Another Chinese burial custom is the Han-Chinese practice of honouring the dead by dedicating and placing ritual bronze vessels in the tomb. In the intact Northern Zhou tomb of Wang Deheng 王德衡, the most extraordinary objects were ten miniature bronze vessels. Ritual bronze vessels were the main burial goods in the elite tombs during the pre-imperial period, but the number of bronze vessels used in tombs gradually decreased during the Han dynasty. Bronze was a scarce material during the period of disunion because most of it was used for Buddhist sculpture and coins, but bronze vessels were rarely found in the tombs. The most common type of bronze vessel during this period was tripod wine warmer (*jiaodou* 鐎斗) (Dien 2007: 95).

The sets of miniature bronze vessels in the tomb of Wang Deheng have not been found at any other excavated tombs of this period. This set of miniature bronze vessels was most likely commissioned by his father, Wang Shiliang 王世良, who died eight years later. The sizes of the bronze vessels, which range from about 1.5 to 8 cm tall, indicate they were made for the burial (Yun 1993: 49–52). Six of the ten vessels are imitations of traditional Shang or Zhou ritual bronze vessels. Four of the vessels (*ding*, *he*, a cauldron [*you*], and *hu*) have some unusual features, which were seemingly inspired by vessels used by pastoral peoples who lived to the north of China. The *ding* and *he* were traditional bronze shapes, but their added handles made the *ding* more portable and were likely inspired by cauldrons. Cauldrons found in large numbers in the northern and north-eastern steppes are associated with a pastoral lifestyle. The ten funereal bronze objects in the tomb of Wang Deheng document the practice of mixing objects common to more than one culture.

Gold objects

Gold burial goods are not very common in Chinese graves, but they were fairly common in tombs found on the northern frontiers of China and the northern steppe. As Emma Bunker points out, gold objects such as crowns, plaques and jewelry, used by chieftains of northern peoples, were not only status symbols, but also royal regalia (Bunker 1993: 48). Among Northern Zhou tombs, only Emperor Wu's tomb contained gold objects. Although only a few gold objects remained in the tomb chamber of Emperor Wu, it is possible that originally there were many more gold objects, since the tomb had been looted. Emperor Wu's tomb included three gold tube-shaped objects found near his coffin in the west side. About 60 g of gold thread were found scattered around Emperor Wu's coffin. The threads were 1 mm in width and wavelike in shape. Textiles woven with gold threads might have been used to cover the top of the coffin or may have been woven into the deceased's robe. The incorporation of gold thread in burial clothing was not a Chinese custom, but it was important in the northern steppe tradition. For example, the 'Golden man' at Issyk in Kazakhstan and gold kaftans found at a royal kurgan at Arzhan 2 in southern Siberia suggest that luxurious clothing was used by royalty and/or warrior chiefs in pastoral societies. The gold found in the tomb chamber of Emperor Wu, therefore, not only reflected his high status, but also emphasized his royal status that set him apart from other members within the elite Chinese society.

Belt ornaments

Belt ornaments in Eurasian steppe tradition symbolize regalia which, adorned with visual motifs, dated back to the third millennium BCE. Nomadic groups, such as the Türks, Avars, and Kitan in Central Asia used such belt ornaments throughout the first and second millennia CE (Bunker *et al*. 2002: 94). A steppe style of belt or belt buckle was found in the eight Northern Zhou tombs: two Xianbei, two Han Chinese, one Chinese with a Xianbei surname, and three Sogdian. The tomb of Emperor Wu contains three complete bronze belts (*diexiedai* 蹀躞带) with buckles, plaques and swords attached to rings. One of the belt sets was attached with a sword, which was the so-called 'sword of the Huns'. This sword, with two P-shaped mounts on one side of the scarab, could be suspended on the swordsman's belt (Marshak 2001: 102–3). This type of sword, hung on the belt, was popular during the sixth century in Central Asia. The swords were usually not found in burials because they were passed down through generations, but they could be seen in public display such as on Turkish stone sculptures (Stark 2008: 153). One of the belt sets, with animal images on bronze belt plaques, is also associated with pastoral tribes. The designs indicated the deceased's social status within their northern steppe culture and within steppe burials.

The design of thirteen rings on one of the belts found in Emperor Wu's tomb was probably associated with the ancient Chinese system. This belt was a double belt with a movable attachment on one plaque that allowed the addition of two sets of thirteen rings. In the *History of the Northern Zhou* a gold belt with thirteen rings was listed as part of the emperor's costume (Linghu 1971: 529) and served as a sign of his high office. The odd number of thirteen rings is possibly related to the use of odd numbers to differentiate social ranks in Chinese tradition. The use of odd numbers has a long tradition in ancient China. For example, using odd-number *ding* and even-number *gui* vessels in burials was a marker of the deceased's social rank during the Western Zhou period (1046–771 BCE). The ornamented belt plaques with two sets of thirteen rings in the tomb of Emperor Wu showed not only his power to rule, recalling northern steppe customs, but also signified his power of office as recorded in the Chinese official text. The steppe style of belt was also used by Chinese generals. One jade belt with nine individual jade rings was found in the tomb of Rugan Yun, a Chinese general with a Xianbei surname, who married a princess of the Northern Zhou. Indeed, the steppe style of jade belts later became part of Chinese official attire. According to Tang regulations, the jade belt was used by the officials above the third rank.

Exotic goods

Exotic goods such as transparent glass, gold finger rings, Byzantine coins and silver ewers, possibly imported from the west, are all found in the tombs of Chinese generals and Sogdians. It appears that western-style ornaments and vessels were more accessible, and perhaps more desirable, in northern rather than southern China during this period. It is worth noting that the Byzantine coins found in the tomb of Tian Hong were pierced at the edge, suggesting that they were attached to a textile. By contrast, the Byzantine coins in the Sogdian tombs of Kang Ye and Shi Jun were not pierced. Additionally, a Byzantine coin was found inserted into the mouth of Kang Ye. Imitations of a Byzantine coin and a gold finger ring were found inside of the sarcophagus of Shi Jun. The interment of coins in the burial was a tradition in Sogdiana. During the sixth to eighth centuries in Sogdiana, Byzantine coins were not the main currency. Rather, Sasanian silver coins were used in major commercial activities (La Vaissière 2005: 173). However, Byzantine coins and imitation coins were found in tombs dating to the periods of the sixth to eighth centuries in Sogdiana (Naymark 2001: 99–125). The interment of Byzantine coins in the Sogdian tombs located within China in the seventh century is associated with their merchant identity, and the use of Byzantine coins or imitation coins was a reference to their homeland (Lin 2005).

Decorated stone funerary furniture

Decorated stone funerary furniture was only found in the three Northern Zhou Sogdian tombs. Wooden coffins were found in the Xianbei and Chinese tombs during the Northern Zhou period. The form of funerary furniture, including a house-shaped sarcophagus and a couch-shaped coffin in the tomb of Shi Wirkak, are possibly inspired by a Chinese tradition. The use of stone furniture, however, may be associated with Chinese and Persian and/or Sasanian traditions. Stone coffins were found in the Han dynasty tombs. Among Central Asians and East Iranians, the corpse is capable of polluting the holy creations of fire, water and earth, according to the Vendidad, 'the law repudiating the demons' (Shahbazi 2011). Rock-cut tombs were used by the Achaemenid kings as their astōdān, bone-receptacle or ossuary. Later, during the Sasanian dynasty (224–651 CE), stone astōdān varied in size from rock-cut tombs to small ossuaries. Some of them were decorated with 'the figures of the dead or of divine beings' (Shahbazi 1987).

The Sogdians, who lived in sixth-century China, possibly continued this tradition. Among the Northern Zhou, parts of the scenes that illustrated both An Jia and Shi Wrikak funerary furniture depict their lives as *sabao* (Dien 2003: 107; Rong 2003). A decorated couch enhanced with gold foil as a background was found in the tomb of An Jia. Carved panels on An Jia's couch depict culturally specific activities and its synthetic iconography emphasizes the diverse cultural environment in which An Jia lived and worked (Linduff and Wu 2006). The framed and painted everyday life scenes in these facing stones centre on travel, hunting, feasting and dancing (Lerner 2005). Many of the images are well known tropes of a lifestyle that recalls his homeland of Sogdiana – riding, hunting, drinking from gilded silver cups, or clothing such as tunics, belts and leather boots. The three types of architecture depicted on the panels, a Chinese-style pavilion, Sogdian-style buildings and a Türk-style yurt provide an overall multicultural framework for the iconographic programme of the entire couch (Steinhardt 2004: 48–62). The interplay between Chinese and 'outsider' elements, articulated in his mortuary setting, was apparently a conscious blending that likely grew out of political expediency and necessity, as well as personal preference. For example, the panels use architectural representations to frame distinctive cultural behaviour, to record the professional life of An Jia and to display a multidimensional identity for the deceased.

Parts of the scenes illustrated on Sogdian furniture are associated with depictions of the soul's journey in ascending to Zoroastrian Heaven. Three panels of the eastern wall of Shi Wirkak's sarcophagus are Zoroastrian religious themes based on Zoroastrian texts depicting the journey of the soul after death (Figure 5.7.3). Intended to be read from right to left, they create a continuous narrative divided into three sections by architectural pillars (Grenet 2007: 472–73). The souls of the deceased couple crossing the Chinwad Bridge of Judgement on the fourth morning after death are shown in panels 1 and 2 and the scene of their transportation to heaven by the winged horses is shown in panel 3 (Grenet *et al.* 2004: 273–84). Similarly, I suggest that the illustrated scene on a couch in Kang Ye's tomb is associated with Zoroastrian religion. In spite of their Zoroastrian topics, those scenes are executed in a Chinese style because the artists and artisans who were hired by the Kang family were Chinese (Wu 2015).

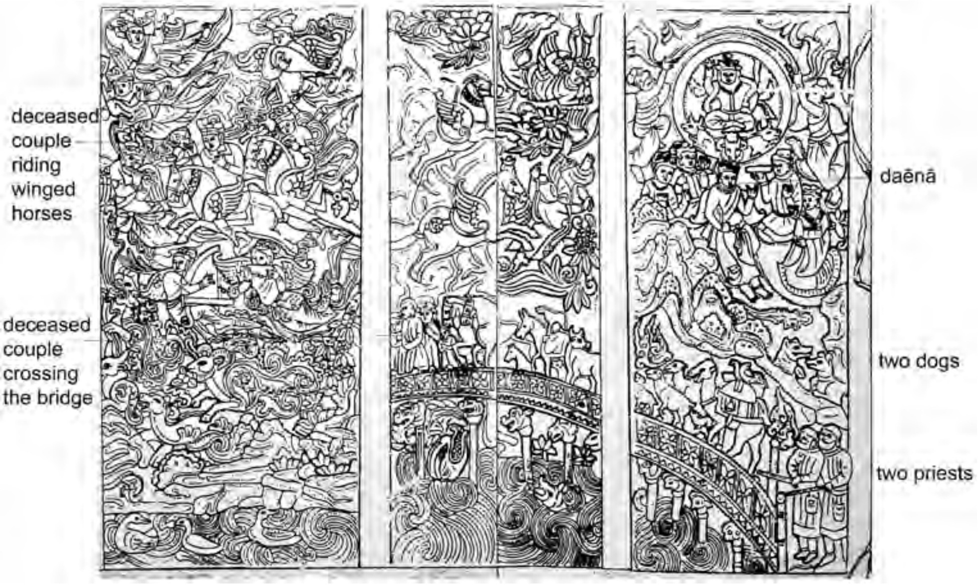
deceased couple riding winged horses
deceased couple crossing the bridge
daēnā
two dogs
two priests

Figure 5.7.3 Scenes of the journey of the souls of the deceased to a Zoroastrian paradise on the eastern wall of Shi Jun sarcophagus (after Xi'anshi Wenwu Baohu Kaogusuo 2005: 20, figure 27, left)

Discussion

The data discussed above show that there was great diversity in both material culture and patterns of use of burial goods in the tombs of Northern Zhou leaders. Data also suggest how actors adopted material attributes from different cultures and this is relevant for our understanding of dynamic connectivity between ethnic groups. An emphasis on multi-scalar globalization promotes the analysis of a diverse range of interactivities and network construction (Feinman this volume). The constitutive elements of globalization examined in this study are related to the institutions of the Northern Zhou, including nomadic tribal military and Chinese bureaucratic systems established by the Xianbei Northern Zhou rulers. Interactions through marriage, trade and political groupings were part of broader issues such as legitimation of power, military integration and access to exotic goods. These issues are ultimately associated with the construction of identities.

Mortuary evidence, such as artefact assemblages, is an important signifier of identity, as are patterns of placement, artistic styles of ornamentation and modes of display. Materials from burial settings are demonstrative of intentionality and choice by individual agents, mourners and the deceased who orchestrated funerary practices and made decisions about accompanying burial objects. Identity is dynamic, fluid and constructed within particular historical contexts, which are themselves characterized by the social, economic and political atmosphere of the time (Jones 1997; Meskell 2001). Similarities and differences of burial settings of different ethnic groups suggest that connectivities among agents occurred at different social and spatial levels, which correspond to their multiple roles in Northern Zhou society, as schematically shown in Figure 5.7.4.

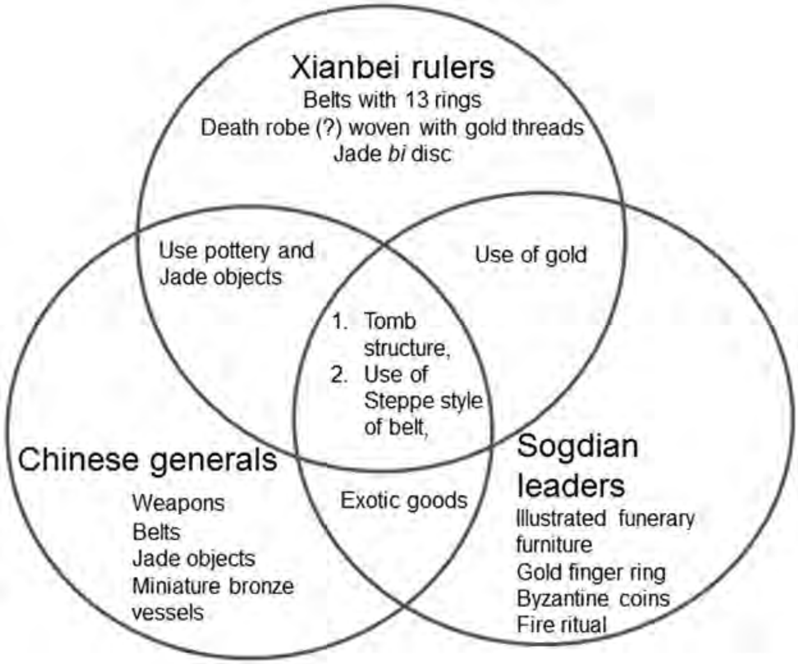

Figure 5.7.4 Interactions among social ethnic groups in the Northern Zhou

Legitimation: state and group levels

The Chinese-style grave structure was a symbol of socio-political status of those foreigner elites who lived in Northern Zhou society, as adopted by the Xianbei and Sogdian leaders of the Northern Zhou. Some scholars suggest that the adoption of Chinese tombs by the Sogdians in the Northern Zhou was a sign of 'Sinicization' (Lerner 2005; Wang 2008: 74), while others argue that it was a compromise by the Sogdians in order to live in China (Sofukawa 2006: 101–02; Luo 2005: 62–63). I agree with the latter theory. Under the historical circumstances discussed above, the adoption of Chinese-style tomb structure is seen to result from political negotiation and was a marker of socio-political status in Northern Zhou society.

Xianbei leaders utilized customs and artefacts that combined ancient Chinese traditions with those from their own pastoral heritage. They created a new set of identifiers that appealed to their culturally varied constituency and identified the Xianbei as rulers in the area of northern China that they had conquered. Evidence in the tomb of Emperor Wu has shown that the Northern Zhou imperial family did not follow the edicts of Emperors Ming and Wu, reported in the *History of the Northern Zhou* that restricted the interment of jade and gold artefacts. Rather, artefacts that refer to both dynastic Chinese and pastoral traditions were integrated in this tomb. On the one hand, a large jade *bi* disc, a symbol of heaven, can be seen as a metaphor of the Xianbei fictive heritage that they derived from the ancient Zhou. The Northern Zhou government attempted to reconstruct the ancient Zhou tradition of the bureaucratic system known as *Liuguan* 六官 and appointed an official to collect ancient jade (Wang 1979: 194).

In order to legitimate their heritage and in imitation of the ancient Zhou dynasty, the Yuwen family assumed the inheritance of the Mandate of Heaven from the preceding Wei dynasty

(Linghu 1971: 45). The Yuwen family positioned themselves within the established political setting through both their claim to the reinstatement of ancient Zhou policies and by using the name of the dynasty. However, in order to highlight their military authority, Xianbei conquerors consciously chose steppe-style objects and burial practices to display their ethnic sovereignty. The adaptation of a unified culture (Chinese) along with the emphasis of unique features (Xianbei and steppe) was a political mechanism, but it may also reflect deeper cultural processes.

There is no archaeological or textual evidence regarding large monuments like temple structures built in the Northern Zhou to boost the Yuwen family's legitimated power. The state burial of Emperor Wu, however, can be seen as a national event that took place during the reign of Emperor Xuan 宣帝 of Northern Zhou. It is possible that Emperor Xuan utilized his father's funerary ritual to demonstrate the Yuwen family's political authority. The construction of the state identity of the Northern Zhou is perhaps associated with their relations with the Türk. The Türks helped the Northern Zhou defeat the Northern Qi in 577, but the relationship between the two states started to change after Emperor Wu's death in 578. The Türks started to attack the border areas of the Northern Zhou at Jiuquan during the reign of Emperor Xuan (Linhu 1971: 117). This external factor, caused by an unstable relationship with the Türks, may have caused Emperor Xuan to disobey Emperor Wu's edict forbidding the use of gold and jade burial objects.

By contrast, the Sogdian leaders utilized the depictions of secular and ceremonial scenes to form their legitimation. As discussed above, three Sogdian tombs contained a stone astōdān or bone-receptacle decorated with secular and/or religious scenes. In their tombs, no pottery figurines, pottery models, or jade objects were found, which is significantly different from Xianbei or Chinese tombs. Gold finger rings or Byzantine coins were found on or near the bodies in these tombs, suggesting a reference to the Sogdian homeland. Moreover, in their tombs, traces of burning suggest the performance of fire rituals. Likewise, the scenes of merchant life illustrated on mortuary furniture commemorated the position of the *sabao*, who oversaw trade with the Hephthalite and Türk empires. The depictions of Zoroastrian ritual in the tombs of An Jia and Shi Wrikak also function as the symbol of religious power recognized by the Sogdians. These funerary scenes highlight a sense of Sogdian cultural and religious identity.

According to their epitaphs, the three deceased males in the Sogdian tombs were probably second-generation individuals who lived in the Northern Zhou kingdom (Wu 2010: 207–19). Official titles, such as *sabao* and *datianzhu*, seem to be inherited within the family, although they were bestowed by the Northern Zhou emperors. The recruit of Central Asians to the Northern Zhou government is directly related to the processes of globalization. The Northern Zhou government employed foreigners in order to maintain trade or international relations with the Hephthalite and Türk empires during the sixth century, as part of the creation of a globalizing network. The Sogdian leaders were in charge of trade and religious activities in the Western Regions. Thus, analysing the construction of their identity vis-à-vis other groups in this region is not only relevant to our understanding of the Sogdians themselves, but also of the political level of the formation of this globalizing region.

Military culture

Within the larger social context, the military culture of the Northern Zhou period profoundly affected the military system in Chinese society during the sixth to eighth centuries. The *fubing* system created by Yuwen Tai in 542 CE continued to be used until the mid-Tang period and had profound social and cultural implications. Significantly, this militarizing society affected the ways in which generals and/or their families built their tombs and displayed artefacts for viewing by members of their society. The structure of these tombs and the assemblages of burial goods in them incorporated goods and practices from very diverse cultures. The tomb of Chiluo Xie is the largest tomb found dating to the Northern Zhou period. His tomb is longer than that of Emperor Wu of the Northern Zhou, reflecting the value of military culture in the Northern Zhou. Evidence of different societal taste and practices can sometimes be recognized in a single artefact. For instance, a belt set commonly used in pastoral burials was found in most of the generals' tombs of the Northern Zhou, marking both military prowess as well as pastoral heritage. During later periods, the use of jade belts became part of the attire for Tang officials who were above the third ranks.

International trade and globalization

Globalization and inter-cultural contacts are crucial for our understanding of this period in the history of China and the entire region, including Central Asia and the steppe zone. Expressions for such contacts are to be seen in the art of the Sogdian funerary furniture depicting interconnectedness among different ethnic groups of people, caravan scenes of trade activities, and various forms of architecture that are transplanted from one place to another; for example, the illustrated scenes on An Jia couch. Historically, the Sogdians are known as wealthy merchants, translators of Buddhist scripts and craftsmen. Such descriptions are found, for example, in Chinese texts at frontier regions. Sogdians immigrated eastward along the land routes of the so-called 'Silk Road' and as far as Chang'an (modern Xi'an) as early as the third century CE and continued to be active until the eighth century (La Vaissière 2005). They built Sogdian settlements along these routes, for example, at Liangzhou, Ganzhou, Suzhou and Guazhou along the Gansu corridor. My study suggests that the role of the Sogdians goes beyond the economic and political spheres and can be seen in the framework of a globalizing region, where the dissemination and adaptation of ideas, motifs, religious practices, etc. were essential for the construction of identities among the newcomers (Sogdian), more established groups (the Northern Zhou) and even the Chinese majority.

Construction of multi-level identities

As discussed above, traditional Chinese goods, such as jade and ceramic objects, are found in Northern Zhou tombs and were adopted by some Xianbei people, but not by Central Asians. These two responses reflect two different strategies of identity construction, which is not without a practical logic. The reactions of Xianbei rulers and Central Asians to traditional Chinese models were presumably influenced by their position within Chinese society. Xianbei leaders constructed a new national identity as conquerors of a Chinese land. Thus one of their strategies was to construct a Chinese-style bureaucracy and gain legitimacy through reference to Chinese history, hence the name of Zhou and the cultural attributes they adopted. For individuals of Central Asian origins, such as Sogdians, their non-Chinese identity had an important value because it represented their intimate acquaintance with Central Asian trade and culture. That was the reason why they were appointed to positions of power. Thus, choosing to forefront their foreign merchant identity had utilitarian value to them.

The Sogdians did incorporate Chinese elements in their identity projection, though they did it in a more subtle way. It can be said that the funerary scenes of Zoroastrian ritual, merchant life, architectonic features and so on, served two purposes: first, they commemorated the special roles Sogdian leaders played in Northern Zhou society; second, they were symbolic of their legitimated authority, as acknowledged by the Sogdian people. The dynamic expression of their Sogdian individuality and cultural identity was complex and multifaceted when analysed in relation to Northern Zhou political and social history. While the Xianbei leaders constructed their new national identity in the Chinese land by mixing steppe burial traditions with selective borrowings from Chinese tradition, the Sogdian foreign elites created more nuanced and multifaceted identities in response to their ethnicity, religion, professional and political affiliations. Part of this identity can be seen as responding to the political policies promoted by the Xianbei rulers of the Northern Zhou, but other parts may have been associated with the need to maintain contacts back home in Central Asia and by religious demands among the Sogdian community. Their aesthetic and iconographic choices were strategically driven by the dynamic socio-political atmosphere, including their vulnerability as outsiders.

As opposed to cultural homogenization, such varied reactions are what we would expect during times of intensive globalization (Jennings this volume). While in this chapter I discussed several concrete examples of how globalization is reflected in the archaeological record of the Northern Zhou dynasty, I argue that the conceptual framework of globalization is relevant for a much broader understanding of the socio-political, economic and cultural history of China and the entire region during the period between the fall of the Han and the establishment of the Tang. The invaluable archaeological materials from Northern Zhou tombs demonstrate cross-cultural interactions among groups and between individuals and reveal an archaeology of identity in relation to the complex process of globalization. This study offers an examination of global connectivities during the sixth century, showing that processes of globalization had an impact on the construction of group boundaries as well as inter-relations among socio-ethnic groups.

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Part VI
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6.1

Deep histories of globalization and Europe

Beyond Eurocentrism

Martin Pitts

When the term globalization first achieved wide currency in the 1990s, temperate northern Europe loomed large in early accounts of globalization's history. The rise of a new global society built upon the foundations of Western civilization was routinely perceived as possible only through the technological innovations of the European Industrial Revolution, hand-in-hand with the European colonization of the 'New World' from *c.*1500 CE, which enabled the first interconnected world-economy with, literally, global reach. This, however, is a view that is increasingly at odds with perspectives that stress the need to de-centre Europe in accounts of both the origins of modern globalization (e.g. Frank 1998; Nederveen Pieterse 2009) and the deep-history of pre-modern globalizations (e.g. Jennings 2011). The chapters in this section of the volume fall in line with such thinking. Rather than merely rallying to an alternative position, its contributions make abundantly clear the myopia and 'presentism' of those who would limit our understanding of globalization to the last century or 500 years. This is not a simple matter of pushing back the start date for globalization, or discussing historical globalizing processes that would eventually lead to something resembling modernity. Instead, the varied perspectives offered in this section highlight both the distinctive character and uneven punctuations of past globalizations that entangled temperate Europe.

Pre-modern European globalizations: de-centring Europe

What kind of story can archaeology tell of Europe and globalization? This is a big question, and one that is not easily answered in the space of six short chapters. This section of the volume does, however, illuminate something of the timeline of the waxing and waning of major eras of globalization, or globalizations, that impacted Europe. Perhaps surprisingly for some, the strongest case for the existence of something analogous to modern globalization is the section's chronologically earliest contribution by Helle Vandkilde on the Afro-Eurasian Bronze Age (3000–700 BCE). Vandkilde breaks from the more reductive World Systems view (e.g. Denemark *et al.* 2000) of a single Bronze Age world-economy founded on basic economic connections between civilizations and regions, instead emphasizing the more substantial basis of material flows as 'transculture'. If contemporary globalization is to a large extent dependent on the exploitation of the geographically restricted commodity of crude oil, Bronze Age globalization (or 'bronzization' as Vandkilde prefers) was similarly dependent on the critical resource of bronze, desirable for a range of social and economic functions, but geographically limited to areas producing copper and, more restrictedly, tin. The desirability of bronze as a highly versatile metal for a wide range of social and practical functions necessitated a kind of time–space compression, in which gaining access to the constituent ingredients of bronze created new long-distance dependencies and cultural interactions. Crucially, unlike many examples of ancient globalization, this process was not dependent on the expansion of territorial empires and states. In this regard, the essence of Bronze Age globalization, founded on material exchanges and interdependencies rather than military and political unification, further serves to highlight the fragility of the supposed 'uniqueness' of modern globalization. This view is similarly echoed in Sindbaek's consideration of the Viking Age: the economic imperative for the large-scale coalescing of regional networks is by no means a unique trait of modernity.

If the Bronze Age was one of the first major punctuations of globalization in temperate Europe, the Iron Age might be regarded as a period of waning connectivity prior to the renewed expansion of networks by Rome. Here David Fontijn and Sasja van der Vaart-Verschoof present a valuable critical perspective: globalization is not a phenomenon of equal intensity across all periods of history. In their exploration of Hallstatt graves across Europe, Fontijn and van der Vaart-Verschoof question the applicability of the concept of globalization, in view of the tiny minority of early Iron Age populations who participated in meaningfully shared cultural practices across a much wider region. If less than 1 per cent of a society were actively engaged in forms of global culture, can we speak of meaningful globalization? While the case is undeniably weak compared with other eras, it is important not to downplay their evidence. Substantial investment of energy and resources went into the elite Hallstatt graves, and even if a minority were directly involved, it is likely that the funerals would have been witnessed by a much larger number of people, who would have appreciated (if perhaps not fully comprehended) the global language in which power and authority were being articulated.

The Roman period forms the next significant surge in the intensity of connectivity and cultural sharing in temperate Europe. Rome's influence was experienced on multiple continents (see the Africa and Asia sections), and has already prompted intensive discussion as a good candidate for ancient globalization (Pitts and Versluys 2015). In this section, Mariana Egri and Søren Sindbaek respectively address the geographical limits and enduring legacy of Roman globalization in temperate Europe. Egri's survey of northern frontier zones and the movement of goods produced within the Roman empire into 'barbaricum' demonstrates the huge scale of Rome's material impact well beyond the traditional borders of empire. Moreover, Egri's analysis rejects the straightforward link between the spread of such objects and the transmission of notions of Romanness. While in most cases Roman goods were selectively appropriated and internalized to suit local consumption practices, the transfer of Roman cultural practices was mainly evident in communities with closer ties to Roman military communities located at forts and military outposts. This example reinforces a conceptual pay-off from applying globalization thinking to Roman history: the Roman empire is better characterized as a polycentric periphery (Nederveen Pieterse 2015: 233–34), in which every centre acts as a node in its own right (even a frontier outpost), as opposed to placing too much emphasis on the city of Rome itself (cf. Wallace Hadrill's 2008 persuasive but flawed biological metaphor of Rome/empire as heart/body).

In the aftermath of the decline of Roman and Mediterranean influence in northern Europe, Sindbaek presents a compelling narrative of the re-establishing of urban culture and long-distance exchange networks. This chapter underlines the economic imperatives for such a process, in contrast to chapters focusing on cultural dynamics within already established networks.

Here, developments in northern Europe can be seen to coincide with global punctuations in connectivity – the Byzantine-Sassanid dynamic of the sixth century CE, and the Islamic empires of the ninth–tenth centuries CE. Sindbaek is, however, at pains to point out the limits of direct imperial agency in these processes. As a so-called 'periphery', temperate Europe formed a vital part of a series of inter-linked regional systems across Afro-Eurasia, which still required communities in the north to be outward looking and actively engaged rather than passively exploited.

The last two chapters in this section by Martin Pitts and Laura McAtackney provide fresh perspectives on the most recent and familiar era of globalization in Europe. Pitts's contribution examines the effect of Chinese porcelain acquired by the Dutch East India Company's mercantile network on pottery use in the Netherlands, as seen in the context of global patterns of china consumption. This piece demonstrates the capacity for archaeological studies to shed new light on seemingly well-understood historical global encounters and regional phenomena, such as the so-called civilizing process in Europe. In this case, while the Dutch East India Company facilitated the major connections between east and west, in cultural terms it seems to have acted as a conduit for the appropriation of objects with Chinese genealogy, and the absorption of consumption practices originating in the Middle East, to be repackaged as something inherently European. This chapter undermines the Eurocentrism present in explanations of the origins of everyday material culture used in contemporary global cultures of eating and drinking. In contrast, McAtackney's chapter explores the impact of globalization in the last century not through moving objects and commodities, but through the biography of a static structure: Kilmainham Gaol, Dublin. Through the analysis of graffiti preserved in the building, McAtackney investigates the impact of major global events and social movements in a highly politicized local context – most notably relating to the experience of World War I, suffrage politics and Irish Republicanism. As the final contribution in the section, this chapter encapsulates the paradoxical position of temperate Europe in global history: often remote and distantly affected by major world events, but never lacking in innovation – cultural, economic, political or otherwise.

Archaeologies of globalization: scales and methods

If temperate Europe was seldom a major driver of past globalizations, it nevertheless presents an ideal region to study the long-term ebbs and flows of such processes. The chapters that follow showcase a range of complementary methods and approaches for studying globalization from material culture and archaeological data. While until recently European archaeologists have been mostly reticent to explore globalization as a concept, this is an area in which archaeology has much to offer. In this regard, the long European tradition of scientific excavation and recording means that Europe can boast an enviable range of archaeological databases that are well disposed to address questions of long-distance trade, human mobility and the inter-cultural exchange of ideas, from prehistory to the present.

This section makes it clear that the archaeological study of globalization requires new ways of working between different analytical scales, from the literally global and pan-regional, to the level of regions, localities, individual sites, assemblages and objects. Considering the cultural dimensions of globalization, the contributions of Vandkilde, Fontijn and van der Vaart-Verschoof, Egri and Pitts all highlight the need to situate local assemblages in a global perspective by comparing data from across multiple regions. Careful analysis is required to determine whether an assemblage of artefacts was the product of shared practice at an inter-regional level. Doing justice to globalization requires the simultaneous analysis of multiple local contexts and characterizing the flows of objects and ideas that connected them: it requires archaeologists to do more than simply put individual sites in their national and regional contexts, or draw links between nodes in a network diagram. In this regard, McAtackney's chapter is the exception that proves the rule – sites of unusual preservation or intrinsic heritage value such as Kilmainham Gaol are less amenable to big picture comparisons and are more productively studied as exceptions. Nevertheless, a major implication for the study of globalization is that it encourages a shift back to the wide-angled perspective of World Systems approaches that enjoyed popularity in archaeology in the 1980s. This perspective resonates most strongly with the chapters that address economic phenomena, most notably those of Vandkilde and Sindbaek. These contributions provide helpful blueprints for doing grand narrative in archaeology, firmly grounding macro-level patterns with detailed archaeological examples that illuminate the impact of particular exchange networks and connections.

Taken together, it is clear from the chapters in this section that archaeology has much to offer the future study of globalization. At present, it should be stressed, this is only a potential, and it depends upon the use of appropriate methodologies. As latecomers to the party, archaeologists must negotiate a great deal of literature on the subject already written (much of which their data contradicts), while being mindful of the risks of globalization as a buzz-word that evokes unhelpful connotations of the modern.

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6.2

Small, medium and large

Globalization perspectives on the Afro-Eurasian Bronze Age

Helle Vandkilde

Introduction

The Bronze Age shows many similarities with contemporary globalization. With the note that the scale differed tremendously between then and now, a comparative perspective is in tune with recent scholarship on ancient globalizations (Jennings 2011). The advantage of comparison with recent globalization is its thorough theorization by a plethora of social science scholars, and yet the Bronze Age was not globalization in the sense of enfolding the entire globe (cf. Robertson 2003, this volume). Due to this major difference in geographical reach the term *bronzization* (Vandkilde 2016) is employed to conceptualize how the Bronze Age was an overarching phenomenon knit by one crucial resource and maintained by innumerable interconnecting activities over several hundred years.

The Bronze Age (*c*.3000–700 BCE) has often been subject to macro-economic analyses rooted in world-system theory (e.g. Sherratt 1993, 1994; Kristiansen 1998; Ratnagar 2001; Beaujard 2011). A globalization perspective is, by contrast, novel in the setting of Bronze Age studies (Maran 2011; Vandkilde 2007a, 2010, 2014a: Aslaksen 2013), but may hold good potential to enable coherence between different scales of analysis and hence to enhance understanding of Bronze Age deep history from small over medium to large. The emphasis here is on northern Europe, but against the background of a larger Bronze Age world.

The following globalization traits may be considered typical for the contemporary era, while also inviting comparison with the Bronze Age. First, globalized societies are glued by so-called transculture, which is economically important, culturally appealing and most often materially manifest (cf. Epstein 2005). Second, people respond in a socio-culturally informed manner, and often creatively, to transculture. Third, transcultural resources travel fast as entangled random flows and as directional transportation of goods (Inda and Rosaldo 2008; Nicolaescu 2004). This in turn produces new dependencies between local life worlds and the exogenously global (Giddens 1996; Friedman 2006). Fourth, as both precondition and consequence, cultural and human movements are multiplied. Improved means of transport enable time–space compression, while economic and technological growth more generally enhance ‘globalness’ as a state of mind (Urry 2007). Fifth, globalization trends on the one hand towards a democratization of exogenous resources and culture, which impact all social layers of the connected societies and not only the upper rungs (Robertson this volume). On the other hand, the global hype with relentless introductions of novel advanced forms of transculture, as counter-trend, expedites new inequalities (Friedman 2006). Finally, globalization can be said to encompass conjunctural as well as disjunctural, or frictional, forces in a relationship that is not directly reducible to Wallersteinian world systems of cores and peripheries (Appadurai 1996; Tsing 2004). Rather, globalization is an intensified interconnectivity enfolding many hubs, nodes and inter-societies in networked complexity. It is, furthermore, worth noting that the contemporary globalization has a history (Robertson 2003).

Bronze: an inter-societal crossover and game changer

Copper was the direct antecedent, and main component, of bronze. During the Chalcolithic period, copper was used for ornaments as well as for weaponry. Copper items such as hammered trinkets for dress and body, small daggers and axe heads were at the time subject to elite performances involving both males and females. There is a clear social exclusivity present in the handling of copper, underlined by its relative rarity and the generally low amounts in circulation: this is exemplified by cultural highlights in south-eastern and central Europe 4500–2900 BCE (Hansen 2011) and by the Corded Ware and Bell Beaker communities during the third millennium BCE (e.g. Vandkilde 2007b). With the breakthrough of *bronze*, this socio-cultural and economic restrictedness of metal began to evaporate. While copper for some 3,000 years remained exotic with restricted access, bronze and metal-based technologies at the turn to the second millennium BCE pushed increasingly linked societies across the threshold to a true metal

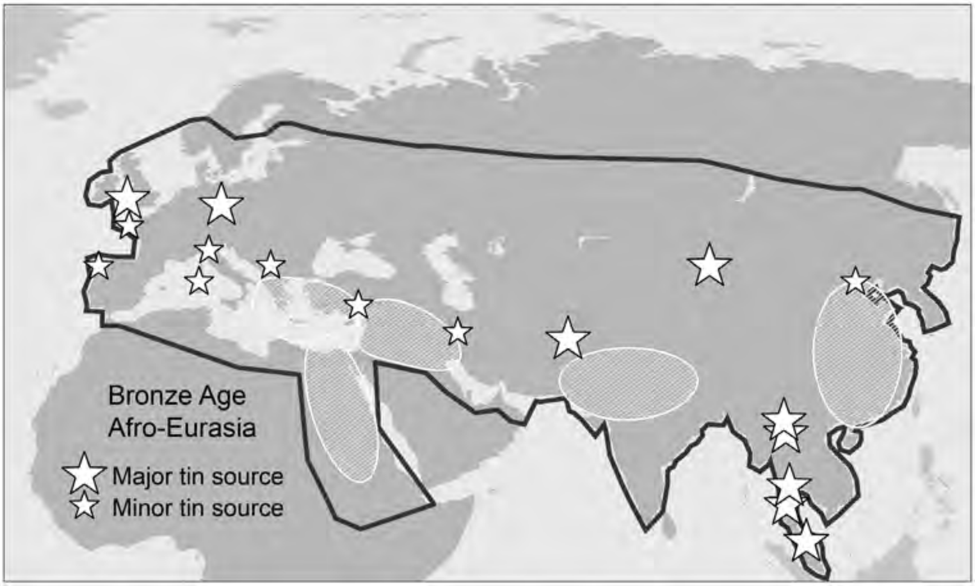

Figure 6.2.1 The geographical range of the Afro-Eurasian Bronze Age 2000–1200 BCE. Tin sources are indicated approximately: a large star denotes a large source, a small star a smaller one. Urbanized hubs with irrigation agriculture are encircled, to show that provision of tin and the making of bronze required long-range movements and connectivity reaching far beyond the urban familiar

age driven by demand, supply, multiple growth and even periods of crisis therein. By 2000 BCE, the innovation of bronze had been successfully adopted by societies across an Afro-Eurasian hyper-region ranging from Europe's Atlantic brim to China and from Scandinavia to North Africa (Figure 6.2.1).

The game-changing role of the artificial substance of bronze was rooted in its potential for multiple uses but definitely also in the geological and geographical restrictedness of copper and, most particularly, tin. Bronze could be transformed to suit an almost unlimited range of uses due to its pliability, shine and hardness when worked. This changed the entire societal set-up from a primary reliance on local resources to increasing reliance on exogenous resources. Desirability, and the fact that the crucial resource of bronze had to be obtained by travelling out, or by making the metal come to you, created a new and fundamental dependency, which in turn 'made the world smaller' since interconnectivity was no longer merely an option. Bronze was *the* transculture of the Bronze Age. As raw material and objects, bronze easily crossed different cultural groups, techno-economic schemes and societal solutions, hence making territorial boundaries increasingly porous.

Throughout the Bronze Age, bronze had many different uses. A basic one was as currency, or perhaps more accurately, as standardized convertible or ingot. First, bronze was shared cross-culturally as a valuable which could be cut, measured, weighed and recycled repeatedly (Pare 1999). Second, in a number of cases bronze may have been cast as special-purpose money. The currency or ingot function of the *Ösenringe* – neckrings with rolled ends – of the Early Bronze Age in central Europe has been intensively researched (e.g. Lenerz-de Wilde 2002). The same goes for the oxhide ingots of the Late Bronze Age Aegean (e.g. Bevan 2010). Both these object types are 'readymades', produced near the copper mines in large amounts and according to certain standardized weights while the reasons for their particular forms are shrouded in history. Conveniently, their shapes made them easy to stack for transport, albeit only the neckrings were produced to be portable wealth of a personalized kind. Both were no doubt easily recognized as valuables and attracted meanings along those lines.

Bronze found uses from the stating of social differences and identities to warfare and economy, and often in ways that show these categories to have overlapped. Bronze was used for tools in the economics of daily life from agriculture and subsistence to the building of houses and ships, and progressively so. Use-wear analyses of flanged axes testify to their regular practical uses from around 2000 BCE in temperate Europe (e.g. Kienlin and Ottaway 1998). The bulk of axes, palstaves and socketed axes, were manufactured in large quantities to ease the hard daily subsistence-related work, as were a wide variety of manufactured chisels, knives and harvesting tools (e.g. Kristiansen 1998: 106). By comparison, use-wear examinations of the specialized weaponry of spearheads, battle-axes and swords consistently point to their use in warfare (e.g. Horn 2013), but they had coinciding roles to play in stating social differences and in the social rivalry also tied to war and warriorhood.

Due to their tangible and added value, bronze objects were frequently hoarded either as single depositions or several objects in one ensemble. Once established prior to 2000 BCE, bronze hoarding traditions were maintained for the whole duration of the Bronze Age. Sometimes the hoarded objects were meant to be retrieved again on a later occasion, in other cases clearly not. Albeit embedded in many different societies and not equally frequent throughout the hyper-region, the hoarding practice of the Bronze Age entails a shared logic. This may be owing to the interconnectivity established with bronzization *c.*2000 BCE, since hoarding did not previously exist on such a large and expanding scale. Bronze hoarding reveals at least two – sometimes entangled – motivations, namely *curation* of direct benefit for the living and *sacrifice* to gods or ancestors of indirect benefit for the living (Hansen 2013; Wengrow 2011: 137 figure 11.1).

Metal may have been valued equally across the Bronze Age hyper-region regardless of societies' size or status as urban or non-urban, but nevertheless came to be used in culturally meaningful ways (Wengrow 2011: 136–37). This Bronze Age 'meta-cultural beyond' (cf. Epstein 2005) was inhabited by innumerable different cultures and languages. The cohesion, weaker or stronger at times, was produced by, and relied on, the efficient dispersal of bronze for eight centuries until 1200 BCE, when decline began. Bronze was a transculture of great value to local communities because of its intrinsic capacities for economic and cultural uses.

Bronze – creative responses and translational interactions

In comparison with other periods in prehistory and protohistory, the Bronze Age is remarkably rich in hybrid objects which were neither imports nor genuinely indigenous. Rather, their value may have risen from imaginative and innovative combinations of foreign and local forms, ornamental styles and fabrics. Due to its malleability and status as basically a foreign substance, bronze encouraged translations of the transculturally exotic. Importantly, such objects were highly suitable in local strategies of power and their production in the first place seems linked thereto. Similarly, bronze became engaged in creative exchanges with locally available materials and traditional culture, and this was doubtless also socially and politically motivated. As an example of such skeumorphic creativity c. 2000 BCE, Nordic fishtail-shaped flint daggers were not just copies of contemporaneous Únětician metal daggers, but formed their own value system and stylistic logic, while integrating selected elements from foreign, metal-hilted daggers (cf. Frieman 2009; Vandkilde 2014b). Bronze and materials linked thereto could be fashioned into perfect media in those social strategies that sought to preserve or change the local set-up of traditional culture, as this was under severe pressure due to intensified mobility and penetrable boundaries.

Intriguing patterns can be discerned which relate to bronzization at work on local as well as transregional scales, while revealing peaceful interchanges as well as war-related encounters. In large portions of non-Mediterranean Europe during the Middle and Late Bronze Age, female woollen costumes and bronze ornaments express distinct local and regional traditions. At the same time, an explicit grammar exists in the design and the location on the female body, which exceeds these traditions transregionally (Sørensen 1997). By comparison, weapons are more super-regional in terms of visual properties. Due to their plethora of uses in combat and in mediating social rank and fierce warriorhood, swords, spears and chariots are innovative novelties adopted rapidly throughout the hyper-region. Basically the same weapon type reoccurs in remote places, with a truly transregional distribution. The flange-hilted Sprockhoff/Naue II sword is an icon of the early Urnfield period and a case in point. These lethal slashing swords were in demand and use throughout most of Europe between *c.*1300 and 1100 BCE.

The transculture of bronze made the Bronze Age in a manner of speaking. More precisely it happened through the interactions this substance both inspired and required. This multilayered process in situated place and over geographical space is the crux of bronzization. There are many examples of responsive operations at work, traceable over considerable distances. Here shall be mentioned only one case from the middle phase of the era. The Carpathian Hajdusamson-Apa style of swords and shafthole-axes were adapted to local tastes as it spread along a broad corridor from Transylvania to southern Scandinavia, while also incorporating themes with origins in the Aegean and the Eurasian Steppe. The Bronze Age boasts numerous other creative translations, or hybrids, which are at once local and 'global' to such an extent that it is difficult to identify genuinely traditional culture.

With the adoption of bronze, the underscoring dual engine of mobility and receptivity grew in significance. In effect, the interconnectivity of the involved people and societies developed to a maximum of what was possible within the existing framework of techno-economies. Bronze Age creative translations in many cases exemplify how bronzization was taking place on local ground while it was also a spatial venture that transgressed boundaries, and this in turn illustrates how a macro-history of linked histories was built in a crucial bottom-up process (cf. Appadurai 2010; see below).

Bronze – directional trade and non-directional flows

Non-directional flows, as well as directional traffic, are hallmarks of the current globalization, and can also be identified in the Bronze Age. Above, bronzization has been described as both the spread of and responses to bronze-related resources, technologies, objects and their added values, and this would prompt local or regional-scale networks along with intake of fresh metal supplies brought in from afar in a regularized manner. In the Bronze Age, long-distance directional trade and non-directional flows seem often to presuppose each other. However, what does archaeology more precisely convey?

Bronze metallurgy, defined by the addition of tin to copper, seems to have several origins in Afro-Eurasia in the late fourth and early third millennia BCE (Pernicka 1998; Rahmstorf 2011: 114). The breakthrough of the new technology 2200–2000 BCE is intriguing, but regularities that may have characterized the first crucial dispersal across or within the Bronze Age hyper-region cannot be tracked at present, as scientific data are insufficient. Full tin-bronze use was in non-Mediterranean Europe, established between 2200 and 2000 BCE in areas near the tin deposits of Erzgebirge and, especially, Cornwall. This rapid adoption is in opposition to more remote regions such as southern Scandinavia, which, at this early stage, shows a predominance of tin-poor copper, while full implementation of bronze was delayed till around 1700 BCE at the turn to the Middle Bronze Age (Vandkilde 1998). The greatest challenge is to identify the tin sources in use over the Bronze Age. A recent and pioneering tin isotopy of the sky disc from Nebra, produced in the Circum-Harz region around 1600 BCE, showed tin isotopic signatures compatible with Cornwall tin rather than the close-at-hand tin deposits of Erzgebirge (Haustein *et al.* 2010). Such 'carrying coal to Newcastle' may or may not have been the rule, but the Nebra case could be a forecast of the complexity of interchanges future tin isotopies will reveal.

As regards the dispersal of copper, current research in Europe can suggest a combination of directional trade with more random flows rooted in local metal recycling, small-scale trading and the cultural practices of translation. Trace-composition patterns and isotopic fingerprinting strongly imply that copper was transported long distance, perhaps along a limited number of travelling routes. Only a few of the copper ore sources known today in Europe were industrially exploited in the Bronze Age, and major ores were located in the eastern Alps, the British Isles, the Massif Central, the Iberian Peninsula, Sardinia, Cyprus and likely also the Carpathian Basin (Ling *et a*l. 2014: 127, figure 19).

Southern Scandinavia is an interesting case because of the large amounts of imported metal consumed. This meant full reliance on long-distance transport, but further networking by boat along the long stretches of coast was necessary to feed local demands in the coastal zones that carried the highest population densities. For southern Scandinavia the Bronze Age meant a fabulous bloom of maritime culture rooted in the particular seascape of the geography, while being driven by the necessity to network or to embark on long-range sea travels to provide metal. In the early stage of bronzization in central and northern Europe, 2000–1600 BCE, east Alpine copper sources were prevailing (Krause 2003). However, thereafter and till *c.*700 BCE, this one-sidedness had shifted towards a broader range of European copper ores, to judge from new data (Ling *et al.* 2014). In itself this suggests organized long-range transport, which is also indicated by the large amounts of metal in circulation.

The routes of transport conceivably went along the coasts of western Europe and into the Mediterranean but also across the continent, where the Carpathian Basin served as a crossroad (cf. Ling *et al.* 2014: 129, figure 21; Vandkilde 2014a). From 1600 BCE, non-Mediterranean and Mediterranean Europe had become one interaction sphere glued by long-range transportation, which besides copper may well have included tin, gold, blue glass, amber, wool and silk. Shipwrecks and their cargo of metal commodities from Uluburun (Pulak 2008), Salcombe and Langdon Bay (Needham and Giardino 2008; Parham *et al.* 2013) may suggest such an organized trade to have flourished especially in the late fourteenth and thirteenth centuries BCE. While Nordic amber is customarily recognized as an important component of Bronze Age trade, it is less well known that blue glass beads travelled from the Levant, Mesopotamia and Egypt, and reached exclusive settings in central and Northern Europe (Varberg *et al.* 2015). The spread of amber from Scandinavia to faraway places in western Eurasia is well in accordance with the directional trade described above. Furthermore, the luxury settings of local amber consumption can underline both the social inequalities being built and the variegated cultural responses to this attractive substance across Europe between *c.*1700 and 1200 BCE (Czebreszuk 2007).

The Bronze Age is filled with similar-but-different patterns, which can best be understood against the background of bronzization, with its logic of mobility and receptivity. Much new research pinpoints how it was not only raw materials and luxury goods that travelled long distances. Ideas were also transmitted and became transformed while moving (Kristiansen and Larsson 2005). A prominent example pertains to Scandinavia. Here, high-ranking warriors around 1400 BCE flaunted their horse-handled razors, and this can be understood against the background of long-distance connectivity. Mycenaean warriorhood became translated into a Nordic version, which nevertheless maintained the social significance of a clean-shaven face (Kaul 2013). Importantly, however, similar renewed versions of the idea and materiality of warriorhood were culturally processed across wide stretches of Afro-Eurasia, hence recalling Appadurai's original thesis (1996) of multiple and often non-converging culture flows engaging diversely with local institutions to such a degree that origins become blurred. Such transcultural patterns are identifiable throughout the époque, which was characterized by random network-like flows as well as directional routine transports.

Bronze: high mobility and techno-economic growth

Today's globalization has technological and economic growth as a central element, together with high mobility thriving on and instigating time–space compression. Similar traits are present in the Bronze Age, during which bronze was an impetus for mobility and the dispersal of new lifestyles and economic growth in terms of subsistence, crafts and trade. In the hyper-region, four main categories of techno-economy and society can tentatively be separated. In non-Mediterranean Europe, sedentary communities developed open landscapes of pastures and fields while practicing an advanced form of agriculture with herding as an important addition (e.g. Kristiansen 1998; Müller 2012). Toward the East in Afro-Eurasia, pastoral herding economies expanded as they shaped stable networks of exchange across Eurasia (Franchetti 2008). In the Mediterranean, a hybrid rural-storage-crafting-trading economy was boosted during the Bronze Age (Christakis 2008; Bevan 2010, 2014; Broodbank 2013). Urban clusters constitute a fourth category, which was mostly dependent on irrigation agriculture in the fertile riverine environments of the Nile, the Tigris, the Euphrates, the Indus, the Yellow River and the Yangtze.

Some urban hubs sprang from pre-existing state apparatuses and archival economies, while in the East the mythical Xia Dynasty with the capital of Erlitou (Liu and Xiu 2007) seems to have emerged with the onset of bronzization.

New research shows cultural mobility in Bronze Age Europe to have been high in terms of moving resources. *Human* mobility seems to have been more variable, but this should not surprise us, since even today money and goods continue to move around more than people do (Hirst and Thompson 1996). Measured in isotopic levels, some European burial grounds testify to considerable in-migration whilst others, despite strong in-flows of exogenous materials, show limited in-migrations. It seems that some communities were inclined to migrate out while others made the world come to them (e.g. Pokutta 2013; Wahl and Price 2014; Reiter 2014; Taylor 2013). New results now provide evidence that the Egtved girl of the Nordic Bronze Age upper echelon commuted between distant places around 1370 BCE (Frei *et al.* 2015). In the wider Bronze Age world, research correspondingly reports cultural mobility, especially noting movements between urban hubs and the pastoral communities of steppes and mountains (Kohl 2007; Franchetti 2008; Wilkinson 2014). Increasing dependence on metal was a major instigator to move more and longer, but desire for exotic materials formed part of the quest too. The mobility of Bronze Age communities was at times further motivated by other factors such as alliance, war, natural hazards and over-exploitation of the environment.

Improved mobility systems, as precondition and outcome, facilitated the high mobility of the Bronze Age. Road construction and developed infrastructures were widespread in the hyper-region, directing the traffic across the landscape and across seas. Parallel innovations in crafts took off, encompassing, for example, mining, metalworking, carpentry, shipping, textiles, horsemanship and horse breeding in addition to high-tech crafts specialized in perfumed oils, exotic beads, intricately shaped containers and superb weaponry, from swords and armour to chariots. Improved transport must have saved time compared to what was previously spent on travelling. A number of transport technologies became shared as they were on the move: spoke-wheeled vehicles (e.g. Mamoun and Burmeister 2004), horses for riding and driving (e.g. Anthony 2007) and ships moved by human labour or wind (e.g. Pulak 2008; Østmo 2011).

These innovations and improvements of mobility systems of course aided the speed with which culture could travel and therefore, in analogue with the contemporary globalization, could have resulted in a generally increased awareness of a wider world beyond the safety of home. This would be in concert with the general eagerness to culturally incorporate the foreign and exotic into the domains of everyday life at home, as reported on above.

Demographic growth had, by 2000 BCE, multiplied in temperate Europe (Müller 2015), and dense settlements in a well-organized landscape characterized especially the Urnfield period from the thirteenth century BCE onwards. These developments were linked to economic growth with effective partnership between innovations, and intensive agriculture with efficient plowing (Kristiansen 1998: 104–6). Bronze tools for agriculture or daily work were gradually improved and their commonplace manufacture stands in opposition to the more refined and specialized craft of weapons and ornaments for body and dress. New kinds of crops were furthermore introduced to feed the growing populations (Kristiansen 1998: 102–03; Müller 2015): oat, millet, rye, and horsebean supplemented varieties of naked barley and bread wheat and the animal domesticates of cattle, pig, sheep/goat and horse.

Surplus production could have been used to sustain regular supplies of bronze. Such a composite economy may have flourished especially in periods of bounty. Production of surplus can be linked to evolved economies in the Aegean and the irrigated river plains, but the rest of the Bronze Age world could also have traded its surplus emanating from a wide variety of local resources. Morris has calculated scores of socio-economic development (2011: 135–77, 161, figure 3.3, 166 figure, 3.7, 177, figure 4.2). The developmental curve begins to ascend around 3000 BCE, increases significantly *c.*2000 BCE, while continuing to rise until *c.*1200 BCE. The graphs support the argument made here that bronze, connectivity and techno-economic growth created more of one another between *c.*2000 and 1200 BCE.

Bronze: inequalities *and* broadening access

Bronze with copper, gold and other exotic materials, was amply used to signify social distinctions and often in alliance with other rigorous forms of social statements such as sacrificial hoarding of wealth, the building of grand funerary monuments or the construction of exclusive residences. Increasing social disparity is a trend noticeable in the region of bronzization, but inequalities take many and changing shapes in the countless social realms of Europe alone, not to speak of the rest of the Afro-Eurasian hyper-region during the long period of the Bronze Age.

Does today's broadening access to transcultural resources across social divisions have a Bronze Age parallel? With expanding consumption and circulation, the metal also became more commonplace and less high-class. This is compatible with the impression that bronze was increasingly commodified over the centuries of the Bronze Age, and, along with this trend, became gradually more available for people below the upper social rungs. Besides, as metal came to pervade societies, no social grouping could have escaped its impact. The co-occurring economic growth may well have contributed, as stressed above.

Broader-based accessibility of bronze and its technologies is a visible long-term trend, which may correspond broadly to Robertson's democratization of culture in a present-day context. Bronzization in terms of bronze use eventually came to incorporate wider societal circles. The early rise of new inequalities *c.*2000 BCE, with widespread elite consumption of sophisticated luxuries with their added values, may stem from the new possibilities provided by bronzization, but it is interesting that elitism or class building rarely carried any great permanency – at least not throughout the hyper-region. Rather, constant pressure from below may have contributed to the transformations the period also witnessed.

Inequalities and antagonisms may also manifest at the geo-spatial level. The social and economic polarization into geographies of 'have' and 'have not' that many researchers have linked causally to today's globalization perhaps also evolved within the Bronze Age hyper-region. In a historical vein, Morris (2011: 177, figure 4.2) has compared long-term socio-economic development between East and West. During the Bronze Age social index curves rise high and in parallel in the East and West, with the latter in the lead. At the end of the Bronze Age, *c.*1200–1000 BCE, however, they assume similar levels because of stagnating or downhill trends, especially in the West.

Following a slightly different thread, urban and non-urban sections of the Bronze Age hyper-region may be pinpointed as zones of 'have' or 'have not'. If so, the dichotomy would not primarily be between West and East, but rather between South and North and this could, speculatively, be among the reasons for the cessation of the Bronze Age from *c.*1200 BCE.

Bronze: conjuncture, disjuncture and historical twines

Random network-like flows and directional transportation formed part of the bronzization engine, but they do not in themselves seem disjunctural or conjunctural. These two opposite forces of the present-day globalization should rather be traced in the encounter between novelties, in the form of bronze, exotica, crafts, ideas and people on the one hand and local histories and traditions in each individual Bronze Age society on the other. Such encounters can be alarmingly disjunctural or frictional, hence with sweeping consequences: a well-known historical case pertains to the cultural, and eventually violent, clash between Hawaiians and Captain Cook's crew (Sahlins 1985). Encounters may, by contrast, take place in eager reciprocity, or at least neutrality, while selectively incorporating the exogenous into a local resource or personal capital (Otto 2013).

With its numerous porous borders and moving innovations it is conceivable that Bronze Age societies experienced these opposite scenarios as well as those in between. Two northern European cases illustrate just this: southern Scandinavia entered the metal age *c.*2000 BCE. During the first 300 years, converging effects prevailed. The innovation of bronze was mostly traditionalized into the familiar axe form and into deep-rooted wetland rituals. This altogether tradition-maintaining consumption of bronze ceased when sizeable amounts of metal were brought in around 1600 BCE, a point in time when disjunctural frictions between old and new ways stand particularly clear in the record. At this point, much social life was becoming linked to metals and the exogenous social ideologies and tripartite cosmologies they mediated. This changing state of affairs can be attributed to the ambitions of the 'wannabes', who buried their dead with exquisite bronze equipment in large mounds built on prominent hills in the landscape (Vandkilde 2014a). The new focus upon weaponry and occurrence of trauma can suggest that conflict and warfare contributed to the societal change (Vandkilde 2014a; Horn 2013).

Bronze Age communities captured in friction due to social inequality on the rise and disagreements about ongoing changes, or oppositely a relative consonance tied to the new possibilities for wellbeing now obtainable, cannot have been uncommon scenarios across the Bronze Age world. Besides, the transculture of bronze must have been a cogent reminder of a far-ranging world beyond the familiar home, which might compare with the present-day globalness of mind.

Conjunctures and disjunctures may have been among the forces that drove 800 years of Bronze Age history across a number of thresholds. If slight beginnings and phases of shrinkage are reckoned, bronzization lasted 2,300 years. This is a longer time span than the contemporary globalization, which had its major breakthrough as late as 1770. Like its recent parallel, bronzization encompassed numerous connected histories that may have undergone change in a fairly linked manner, with a breakthrough *c.*2200–2000 BCE followed by a major threshold of rapid growth *c.*1600 BCE, a marked threshold of decline *c.*1200 BCE and an ultimate conclusion *c.*750 BCE. Whereas the high cultural mobility of the Bronze Age is today widely recognized and presently being mapped through increasingly sophisticated methods, the historicity and degree of synchronous change within the Bronze Age world is insufficiently understood.

With the interconnectedness of bronzization, convergence and divergence could hypothetically spread to become macro-regional and would then explain why the Bronze Age world seems at times more coherent than at other times. Generally speaking, and compared to preceding époques, uniformity in material culture, and perhaps values, tended to predominate, particularly in Europe, during the fifteenth to thirteenth centuries BCE. By contrast, disintegration with regionalized traditions of culture at other times prevailed, notably in the seventeenth century BCE and especially from the twelfth century onwards, as the Bronze Age was shrinking in geographical coverage and drew to an end.

The Bronze Age is often explained and understood in terms of its several hubs and cores, but these were hardly principal engines or formed the skeleton of the overall Bronze Age world. Urban hotspots, with their war campaigns, archival economies and evolved trading probably impacted, but did not design or dictate Bronze Age interconnectedness. Rather, these urbanized hubs formed part of wide-ranging spheres of interaction, in addition to creating their own regional networks. As regards economy and politics, their influence was thus primarily regional. This can be exemplified by the small palatial states of Crete, whose impact was the Minoanization of the east Mediterranean region (Niemeier 2009: 11–21).

It is inadequate to consider the Bronze Age in terms of developed regions that exploited underdeveloped regions. The interconnectivity enhancing bronzization, and vice-versa, rather relied on a large number of interaction spheres within the hyper-region: such spheres of interaction, for example, comprised the maritime inter-societies of Scandinavia and the Mediterranean or the pastoral confederacies of the Eurasian Steppes. There were several larger and smaller spheres of interaction, but they overlapped, were regularly transgressed and changed through time. The Bronze Age does not seem reducible to world-systemic order: it was much more a networked complexity, impacted by the growth and decline of its parts (cf. Knappett 2011, this volume).

Conclusion: globalization perspectives on the Afro-Eurasian Bronze Age

A number of traits defining the globalization of recent and contemporary history have been pinpointed above in the setting of the Bronze Age. However, some globalization characteristics were more clearly present than others. The inquiry has built on the concept of bronzization (Vandkilde 2016) to describe the Bronze Age as a phenomenon of interconnectivity doubly led by local embedments and transregional movements.

The Bronze Age was diverse along multiple scales but nevertheless coherent and interweaved across a hyper-region in Afro-Eurasia, glued by the critical resource of bronze. This alloy was on the one hand extremely desirable due to its manifold social and economic applications and potentials, while on the other hand, the components of copper and especially tin were geographically restricted in their nature-given occurrences. This combination called for a hitherto unprecedented mobility to feed increasing local demands and dependence on this pliable alloy. The fundamental necessity of both short-range and long-range transports in concert with local communities' constant exposure to outside worlds was the energizer of bronzization from its breakthrough around 2000 BCE to its decline around 1200 BCE.

Bronze was a transcultural resource that both transferred and inspired creativity and innovation between and within local economic and social domains. With the increasing flows of bronze, many other commodities came to travel widely and local economies were boosted in the process with parallel innovations in several sectors, while diverse local responses to exogenous culture were inevitable. It is, furthermore, possible that the Bronze Age can be considered a unique case of pre-modern globalization, which was historically driven across thresholds of change by rivalling forces of conjuncture and disjuncture.

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6.3

Local elites globalized in death

A practice approach to Early Iron Age Hallstatt C/D chieftains' burials in northwest Europe

David Fontijn and Sasja van der Vaart-Verschoof

Introduction

At the end of the ninteenth century, an astonishingly rich grave was unearthed in Wijchen, the Netherlands. A dazzling collection of decorative bronze elements of a four-wheeled wagon, as well as a bronze bucket, a very long iron sword, bronze and iron tools and ornaments were discovered together with cremated bones in a ceramic urn (Pare 1992: 219–20; Van der Vaart-Verschoof in prep.). The grave dates to the Early Iron Age Hallstatt C/D Period (Pare 1992: 151). All objects are unusual and generally absent in the contemporary, and by comparison modest, urnfield graves in this region. Even by European standards, it is extraordinary and lavish burial equipment. Most of these objects (Figure 6.3.1), including elements of an entirely new type of four-wheeled wagon, were made in central Europe (Pare 1992: 170–71).

The anthropomorphic protomes with Etruscan-style braids on the bronze linchpins of the wagon are intriguing (Figure 6.3.2), since such representations are otherwise unknown in this part of Early Iron Age Europe (cf. Wells 2008b: 22–23). While Pare (1992: 170) argues that the Wijchen wagon and its linchpins were made north of the Alps in the Hallstatt Culture of central Europe, he also views these linchpins as "unthinkable without influence from Central Italy" and the braids of the Wijchen protomes "can only be compared with the 'back braids' seen on representations of Etruscan women" (Bonfante 1976).

The presence of a central European wagon with chiefly paraphernalia and Etruscan-styled protomes in a place as far north as Wijchen is an evocative example of the Europe-wide reach of Iron Age contact networks. This chapter considers whether such impressive connectivity can be considered evidence of an Iron Age form of globalization. We explore this question through discussion of a particular kind of Early Iron Age elite burial that is found in different parts of Europe: the so-called chieftain's grave or princely burial.

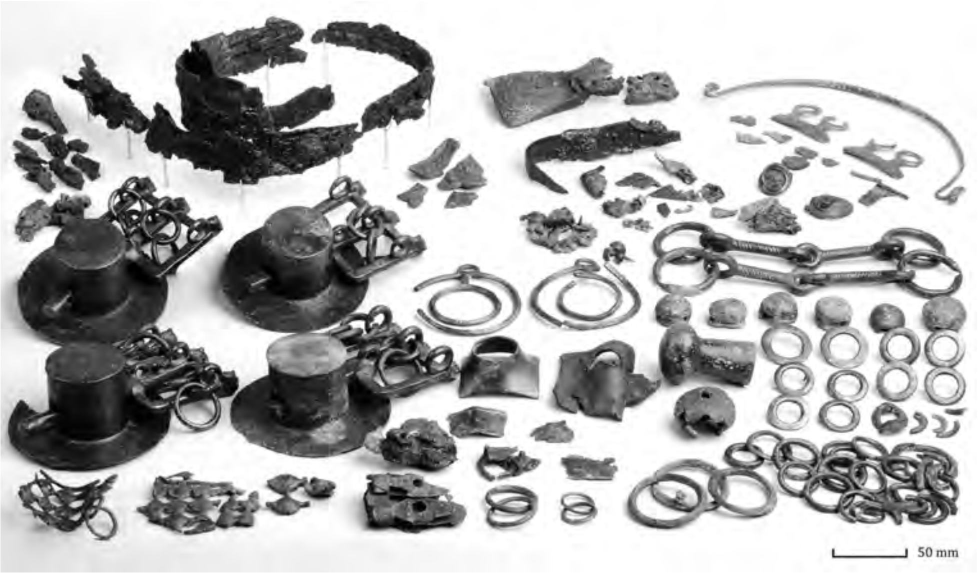

Figure 6.3.1 The Wijchen burial (J. van Donkersgoed)

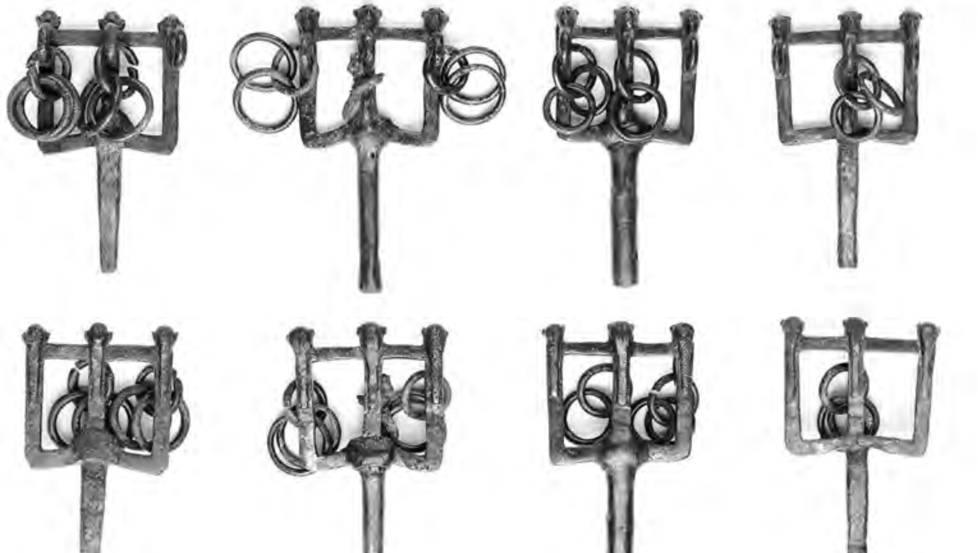

Figure 6.3.2 The Wijchen linchpins, front and back view (J. van Donkersgoed)

The rise of elites in northern Europe: beyond core–periphery relations

The emergence of lavish burials known as Hallstatt chieftains' or princely graves (Roymans 1991; Olivier 1999) reflects one of the most noteworthy developments in Europe at this time: the rise of elites north of the Alps. It is usually seen as linked to the emergence of state societies like the Phoenicians, Greeks, Etruscans and Carthaginians in the Mediterranean and the northern expansion of Mediterranean trade networks and colonial interaction (Cunliffe 1994). Structural trade connections were established between the literate state societies in the Mediterranean and the illiterate north of Europe. Etruscan and Greek societies traded and exchanged goods with indigenous communities in northwest and central Europe (Cunliffe 1994: 341–49). A number of historical events, including the establishment of a Greek colony at Marseille, led to a stronger orientation of Etruscan and Greek trade activities towards northwest Europe (Dietler 1990: 354–55; Cunliffe 1994: 344). These were particularly focused on the distribution of wine and wine-drinking equipment from the Mediterranean to the north (Dietler 1990: 355).

In the past it was thought to reflect a process in which Greek habits were adopted by indigenous societies ("Hellenization", cf. Bouloumié 1981; see Dietler 1990: 356 for a literature overview). In later scholarship, it was more the prestigious value of Mediterranean objects that was considered key. In a highly influential paper, Frankenstein and Rowlands (1978) argued that these Hallstatt elites came to power by controlling the circulation of prestige goods from the Mediterranean. Largely due to their seminal work, the rise of these Early Iron Age elites tends to be discussed in terms of core–periphery/world systems processes (cf. Cunliffe 1994; Roymans 1991). As Knappett (this volume) and Pitts and Versluys (2015: 8) argue that globalization is a nuanced version of core–periphery relations, a book on globalization in the ancient world needs to pay particular attention to the case of the Hallstatt elite graves.

The Hallstatt elite burials

These very rich Early Iron Age elite burials belong to the western and eastern groups of the Hallstatt Culture found in central Europe (for example Wells 2008a: 361). They date to the Hallstatt C/D periods (*c.* eighth–sixth centuries BCE) and stand out for containing – in differing combinations – (parts of) decorated four-wheeled wagons and elaborate horse-gear, metal drinking vessels, weaponry, tools, toilet articles and body ornaments (Kossack 1970: 1974; Pare 1992; Diepeveen-Jansen 1998, ch. 2; Krauße 2006; Wells 2008a.). In the Mediterranean, graves containing wagons are known from Villanovan and Etruscan Italy (Pare 1992: 192–95) and so is communal drinking equipment (situlae; Frey 2011). Even though the Italian wagons differ from those found north of the Alps (being two-wheeled chariots rather than four-wheeled wagons), it has been argued that such graves, particularly the north Italian ones, have affinities to elite graves of the transalpine Hallstatt group (Diepeveen-Jansen 1998: 35; Pare 1992: 194: a.o. in the *pars pro toto* deposition of wagon elements).

It has been argued that the objects placed in Hallstatt elite graves were meaningfully related to each other, and they are widely assumed to represent a shared 'elite ideology' that is thought to have its roots in both northern and Mediterranean Europe (Diepeveen-Jansen 1998: ch. 2; Huth 2003a: 51–55, 2003b). The rich grave goods and monumental barrows that cover them make these elite burials of a kind unprecedented in north Alpine Europe (Roymans 1991: 57; Wells 2008a: 362). Some of these burials rank among the richest graves known from European prehistory (e.g. Frankfurt-Stadtwald (Fischer 1979; Willms 2002); Großeibstadt Grab 1 (Kossack 1970); Otzing (Classen *et al.* 2013) or Hochdorf (Krauße 1996)). It is thought, particularly for some of the later western Hallstatt elites, that they owed their power for an important part to their manipulation of trade connections with Greek and Etruscan society (Frankenstein and Rowlands 1978; Cunliffe 1994: 344–49).

However, graves containing elements of similar wagons, drinking equipment and weaponry are also known from a region that is clearly separate from the central European burial group: the Hallstatt C graves in the present-day Low Countries (Roymans 1991; Fontijn and Fokkens 2007; Van der Vaart-Verschoof in prep.). The Wijchen burial is one of them. There is no evidence for structural trade of exchange relations between this northern region and the Mediterranean. The rise of Hallstatt elites therefore cannot be solely understood as resulting from what happened in a Mediterranean "core". So, rather than conceptualizing relations between the Mediterranean and northern regions as core and peripheries, we might be dealing with ideological themes that were – to a different extent and in different ways – shared between European regions (Roymans 1991). The question is: was this, *sensu* Knappett (this volume), a form of "intra-cultural" sharing that we can call globalization?

Approaching globalization through the study of practice

The elite burials of the Early Iron Age Low Countries, including Wijchen, contain grave goods that are extremely rare and were obtained from far-flung reaches. By itself, however, this is not just cause for labelling these burials the result of globalization processes. Helms (1993: 99) argues that the significance of acquisition of goods from afar sometimes has primarily to do with obtaining material from "qualitatively defined distant places of origin" for its own sake and much less with an informed exchange based on reciprocity. According to Steger (2003: 13) globalization involves not only extensive connectivity, but also "awareness" on the part of local communities involved of "deepening connections between the local and the distant". Likewise, Knappett (this volume) argues that globalization implies that there was a "shared", "intra-cultural" ideology. This makes studying it among the illiterate societies of Early Iron Age Europe particularly difficult. After all, how can archaeologists prove that prehistoric communities in one locality were aware that they shared "codes of conduct" (Jennings: this volume) with societies living far away? As set out above, archaeologists may recognize Italian influences in the decorations of the Wijchen wagon found 1,000 km north of Etruria, but it does not necessarily follow that the prehistoric mourners who constructed the Wijchen burial had any concept of "Etruscans", or even knew where such people lived.

Globalization implies that connected communities have a particular conceptualization of the non-local other – a perception of foreign people as communities that the local group has affinities with (Steger 2003: 13). This is also a fundamental point of Helms' study, who argues that "distance" is primarily a "cultural creation" (1993: ch. 2). Helms shows how perceptions of foreign others can be based on narratives and cosmologies that can go back to real travels made by some individuals (1993: ch. 3). Crucially for material culture studies like archaeology is that Helms points out that cultural perceptions of non-local societies can be based on imported objects themselves (1993: 114). To some extent, objects have "agency" within society (Gell 1992: 43). They "do things" to people by their visual and material characteristics (Garrow and Gosden 2012: 25). In studies of Bronze Age depositions, it has been argued that visual similarities and differences between metal objects may have been a factor that steered which objects were associated and dissociated in particular kinds of depositional contexts (Sørensen 1987; Fontijn 2009). However, visual and material qualities are just the starting point for the social and cultural evaluation of foreign things. Thomas (1991: 84) argues that it is not so important what objects "were made to be" but rather "what they have become". Importantly, meaning and value "emerge in action" (Graeber 2001: 45). This implies that what people *did* with objects matters and may even be essential to how they came to understand objects (cf. Schatzki 1996).

To determine whether elite identities were globalized, we argue that it therefore may be important to determine whether communities in one locality treated objects in a similar way as in others. If there is coherence between practices in one region and another, this is at least one empirically verifiable way to recognize "shared codes of conduct" that Jennings (this volume) sees as one of the characteristics of globalized behaviour. Rather than "networks of objects", it is "networks of practices" (Brown and Duguid 2000) that matter in globalization debates.

In this chapter a practice perspective is adopted, whereby the focus is not solely on the selection of items for burials (like in previous studies such as Roymans 1991, Huth 2003a and Fontijn and Fokkens 2007), but also on the practices enacted (cf. Schatzki 1996). This leads us away from seeing the Iron Age communities in the Low Countries as receivers of oddities from the remote south-east, to people who more actively engaged with such items in ways that correspond to how they interpreted these non-local items (Fontijn *et al.* 2013b; Bourgeois and Van der Vaart-Verschoof in prep.). This focus on practices is feasible for archaeological studies, as many practices leave signs on the objects or can be deduced from the context in which objects were deposited.

Exploring the north: globalized identities?

This chapter explores the lavish Early Iron Age Hallstatt C/D burials situated around the rivers Meuse, Rhine and Scheldt in present-day Netherlands and Belgium known as "chieftains' graves" (Modderman 1964; Van Heeringen 1998; Fontijn and Fokkens 2007; Roymans 1991). This is a historically evolved term used to refer to these burials, and we use it as such. Though spatially separate from the princely Hallstatt C/D graves of south-west Germany, upper Austria and eastern France (Roymans 1991: fig. 16; Pare 1992: figs 134–35), the graves in this north group contain bronze vessels, weaponry, horse-gear and wagons that were obtained from and predominantly produced in central Europe (Roymans 1991: 36, 39, 50; Pare 1992: 171). These northern graves are rarely included in European-broad discussions of Hallstatt elite graves (see Pare 1992 and Huth 2003a for exceptions). However, they are especially intriguing when considering early globalization.

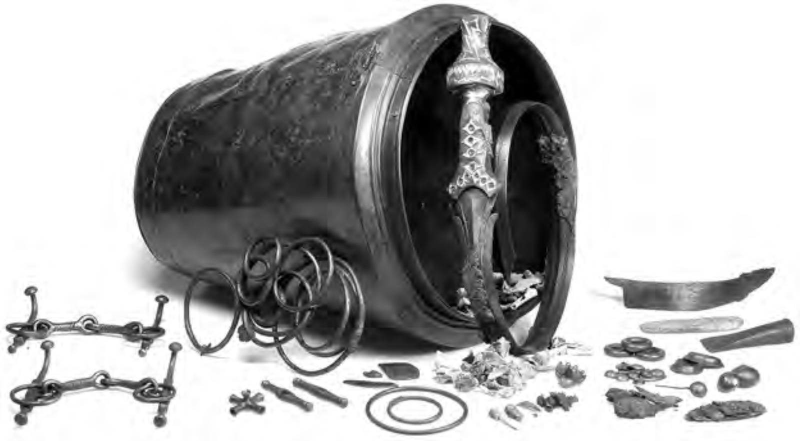

Figure 6.3.3 The Chieftain's burial of Oss (photo by P.J. Bomhof, Dutch National Museum of Antiquities)

Some of the items found in the northern chieftains' burials are entirely novel and disconnected from the local material culture and herald a new development in burial practices (cf. Fontijn and Fokkens 2007: 366–68). Like in south-west Germany and upper Austria, such equipment has been found in monumental barrows that dwarf all contemporary and previous ones and rank among the largest in west Europe, like the barrow of the Chieftain's burial of Oss (Figure 6.3.3; Roymans 1991: 57; Fokkens and Jansen 2004: 133–35). The Hallstatt C/D burial equipment has been argued to reference a "supra-regional, non-local imagery, which is in contrast to the existing emphasis on creating local identities in burials" and to "signal themes of a highly specific kind of elite ideology that was not native to our region" (Fontijn and Fokkens 2007: 362). These northern "chieftains'" graves therefore invite us to start thinking about Early Iron Age elitist mortuary identities as globalized ones. In which way are these "cosmopolitan" and only "loosely connected" to local context – to recall two other features that Jennings (this volume) regards as characteristics of globalization?

Northern Hallstatt graves and their societal context: some observations

In the Early Iron Age, communities in the Low Countries lived in relatively egalitarian, small agrarian groups of only a few households in unfortified agrarian settlements (Roymans 1991: 15). Practically all the dead of a household were cremated and their remains buried in clusters of modest graves with no or only few grave gifts, so-called urnfields (Fokkens 1997; Hessing and Kooi 2005). Over 800 of such urnfields are known in the Low Countries (Louwen in prep.). As these typically contain dozens of graves, and as practically all members of society were buried in urnfields, over 10,000 burials are known, making it the best evidenced burial practice of this part of Europe.

Urnfield cemeteries emerged in the Late Bronze Age (from *c.*1100 BCE) and their numbers rose in the Early Iron Age (Roymans 1991: fig. 24). Whereas Late Bronze Age urnfield burials evoke a rather "egalitarian" ideal (Roymans 1991: 30), particular graves stand out in some Early Iron Age urnfields. A small number of graves (about 60) contain swords, bronze vessels, horse-gear, and/or elements of metal-decorated wagons (Roymans 1991; Van der Vaart-Verschoof in prep., including new data), items that are either imports from central Europe, or produced in shapes and style that are close to those current in that region (Roymans 1991). These can range from graves containing a single sword to more lavish ones that contain bronze vessels, weaponry, horse-gear and elements of elaborate four-wheeled wagons (e.g Roymans 1991: table 4). The latter are the best-known examples and include the graves from Wijchen (Figure 6.3.1), Rhenen, Oss and Court-St-Etienne T.3 (Mariën 1958; Roymans 1991; Pare 1992; Van Heeringen 1998; Van der Vaart-Verschoof in prep.).

Does the presence of such graves with central European (-affiliated) objects mean that people in the northwest conceptualized elite identities in a similar way as people in southern parts of Europe did? This question has puzzled archaeologists for a long time (cf. Roymans 1991; Huth 2003a; Fontijn and Fokkens 2007) and has remained problematic. The difficulty lies in the observation that while it is clear that people used the same sort of objects that were also used in the elite graves of central Europe, they appear to have done so in a different way. In what follows, a new attempt is made to unravel these issues.

New objects

These elite burials contain objects that were previously kept out of the burial record. During the Late Bronze Age, objects such as swords, axes and certain ornaments were deposited in natural places – they are rarely found in burials from this period (Roymans 1991; Fontijn and Fokkens 2007: 354–45). During the Early Iron Age, these objects start featuring in burials, a practice that seems to have been strictly avoided before (ibid.). When creating these burials, the mourners sometimes selected items that were *entirely new*. The horse-gear, elaborate four-wheeled wagons and bronze vessels are unprecedented in the local material culture (Fontijn and Fokkens 2007, 366–68; De Mulder and Bourgeois 2011), and so is the use of anthropomorphic presentations, as visible on the Wijchen protomes (Wells 2008b: 22–23). We should not underestimate the significance and societal impact these new objects and the activities they represent must have had on the local population.

New practices in life

Some of the new objects found in the graves represent entirely new practices that took place *prior* to the creation of the burial. The wagon components and horse-gear found in the Wijchen burial, as well as in other graves, are heavily worn and were extensively used (for example Figure 6.3.2; Pare 1992: 135; Van der Vaart 2011). People were driving these decorated wagons around. Pare (1992: ch. 11) has argued that wagons like the one from Wijchen deviate from regular wagons in their design, the considerable craftsmanship involved and the elaborate decoration. The Wijchen wagon likely attracted considerable attention through its very design incorporating gleaming bronze decorations, some of which jingled noisily like the rings on the linchpins. Moreover, these wagons were pulled by large horses, which themselves may also represent new animals and activities (Kossack 1959; Pare 1992: 3; Van der Vaart-Verschoof in prep.). The driving of these wagons and horses may well have been a significant (ceremonial?) practice in its own right (cf. Pare 1992: ch. 12).

The large bronze vessels found in the Chieftains' burials likely also reflect a decidedly new social activity. As with the wagons and horse-gear, wear on the bronze vessels indicates that they were used before ending up in these burials (Van der Vaart 2011). Roymans (1991: 59–61), like Kimmig (1962/3), argues that these vessels played an important role in cultic drinking bouts in central Europe and may also have done so in the Low Countries. This suggests that communal drinking was a social practice that may have been emphasized in some Early Iron Age funerals – just like in some central European elite graves (Dietler 1990; Diepeveen-Jansen 1998: 41–44; Arnold 1999). Re-discovered carved wooden fragments of a bowl from the Chieftain's burial of Oss are likely the remains of a ribbed drinking bowl, like the one found in Frankfurt-Stadtwald (Willms 2002: 82), and appear to confirm the practice of social drinking (Jansen and Fokkens 2007: 82; Van der Vaart 2011: fig. 27).

New practices in death

These new objects, some of which represent entirely new practices, were incorporated into the burials. The burial rituals themselves, however, also incorporated a new practice: the use of textile and the inclusion of axes. Both are not local practices, but are known from central European Hallstatt graves, where they are seen as part of elite burial customs (Banck-Burgess 1999; Krauße 1996: 319–20). In a few instances, there are indications that objects and the dead were wrapped in (high-quality) textiles prior to placement in the grave or urn, either individually or in sets. In some case objects that belonged together, such as the dismantled remains of horse-gear, were wrapped up together (Jansen *et al.* 2011; Van der Vaart 2011). This practice has been recognized at the chieftains' burials of Oss and Rhenen, but also at Court-Saint-Etienne T.4 and T.A, and

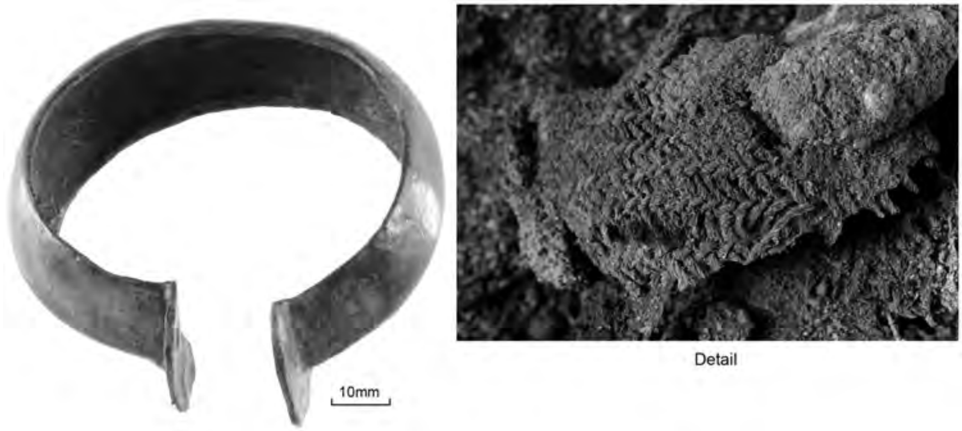

Figure 6.3.4 Bracelet from Uden Slabroek with *in situ* detail of the textile that covered it (photos by Restauratieatelier Restaura, Haelen)

Uden-Slabroek (Mariën 1958: 128; Van Heeringen 1998: 79; Jansen *et al.* 2011: 109; Van der Vaart-Verschoof in prep.). The inhumed dead woman of Uden-Slabroek was covered with a shroud (Figure 6.3.4). This wrapping is so far unknown in the earlier and contemporary thousands of local urnfield graves containing metal items (Louwen in prep.), but is well documented for several graves in central Europe such as Hochdorf (Banck-Burgess 1999).

Another non-local phenomenon is the practice of including an axe in the best furnished of these burials – Oss, Rhenen, Wijchen and Court-St-Etienne T.3 (Mariën 1958; Modderman 1964; Pare 1992; Van Heeringen 1998). With the exception of these graves, there are no indications that axes were interred in graves in this region, whereas they are known in considerable quantities in other contexts (Fontijn 2002: app. 2.14–15). Axes do feature in a number of the richest Hallstatt Culture *Fürstengräber* in central Europe, and are believed to represent ritual butchering tools and a meaningful component of the elite set and identity expressed in these graves (Kraußе 1996: 299–307). In the north-west group, metal axes are not found in the thousands of urnfield graves, but they are known in the most lavish burials of this part of Europe. The fact that axes were included only in these graves might be an indication that – at least some – local communities understood the significance of this set and knew that axes (which they normally excluded from graves) were allowed, and apparently required, to *be part of this kind of elite burial.*

Incorporated in local customs

These elite burials were created through a burial ritual that involved cremation – the normative burial ritual in this part of Europe (Roymans 1991: 14–5; the sole exception is the lavish burial of the (probable) woman of Uden-Slabroek; Jansen *et al.* 2011). Grave goods were sometimes fragmented, deliberately bent and deposited incompletely (like in Wijchen, where only parts of the wagon were deposited or Limal-Morimoine T.1, where only part of a bit was deposited: Mariën 1958: 219). There seems to be a similarity between the treatment of objects and cremated remains of the deceased, as these often also represent only part of the skeleton (cf. Brück 2004; e.g. Smits 2013; Van der Vaart-Verschoof in prep.).

The cases mentioned above all indicate that imported objects like wagons or yokes were taken apart and many items were deliberately transformed (Figures 6.3.1 and 6.3.3). Certain fragments and elements were then placed in the burial, while others, apparently, were deliberately kept out (e.g. Fontijn *et al*. 2013b; Fontijn and Van der Vaart 2013). This implies that it was not the intention of the mourners that *all* elements be included in the burial deposit (Van der Vaart-Verschoof in prep.). It is this destructive cremation ritual and the often deliberate incompleteness that makes the end result look so different from many Hallstatt elite burials in more southern regions. Although cremation graves occur there as well, as do incomplete *pars pro toto* burials of elements of wagons (e.g. Pare 1992: 194), most elite graves are inhumations containing complete objects (for example Frankfurt-Stadtwald (Fischer 1979; Großeibstadt (Kossack 1970: 45–61), Hochdorf (Krauße 1996) and Otzing (Classen *et al*. 2013)). From this perspective, there are several burials in the north group that at first glance appear different from the chieftains' burials, but in fact could be the result of similar burial practices (a point raised before on slightly different grounds by Huth 2003a).

In the elaborate Chieftain's burial of Oss, a large bronze vessel was used as an urn for an extensive burial inventory, including a Mindelheim sword with gold-inlayed handle, horse-bits and decorations for two horses, dismantled yoke components, tools, razors and pins (Figure 6.3.3; Fokkens and Jansen 2004; Van der Vaart 2011). This kind of elite burial is relatively easy to recognize as such. Oss-Zevenbergen Mound 7, found 500 m to the east, is far less so. This recently excavated mound covered an elaborate expanse of charcoal and charred beams with a concentration of hundreds of tiny bronze studs, a few bronze rings or fragments, some decorated bone and a few fragments of human cremation. At its southern edge a ceramic urn filled with part of the cremation remains of a young man was buried (Fontijn *et al*. 2013b: 297; Smits 2013). Detailed study of this complex (involving blockliftings, excavation under laboratory conditions and X-rays) indicates that the bronze studs and rings most likely are the dismantled remains of a decorated yoke comparable to those found in the grave of Frankfurt-Stadwaldt (Willms 2002; Fontijn and Van der Vaart 2013: 193) or Otzing (Classen *et al*. 2013). Unlike in Frankfurt or Otzing, however, only part of the wagon and horse equipment was buried in the Oss barrows. Horse-bits and yoke rosettes were interred in the largest Oss mound, the Chieftain's grave of Oss, and what were probably yoke decorations in nearby Mound 7 (Fontijn and Van der Vaart 2013: 188–93, fig. 7.43).

Making global, emphasizing the local

Summarizing, in the north group in some communities, people created elite identities that have affinities with those in burials in southern parts of Europe. In a small number of lavish graves, this comes to the fore in the deposition of a combination of southern imports that reveal similar selections as in central Europe (cf. Huth 2003a: 51–55). For some, there are indications that these represent social life practices items (ceremonial wagon-driving and communal drinking) that are unprecedented in this part of Europe or were not emphasized in indigenous burial rites before, but that receive ample attention in elite burials in the south (cf. Fontijn and Fokkens 2007). On top of this, it was argued that these northern graves evidence novel burial practices that are so far unknown in this region beyond these elite graves, but do have parallels in central European ones: wrapping of objects in textile and the inclusion of axes in the burial set. The coherence in both object association (apparently recognized as a meaningful combination) and object treatment indicates that in these cases the mourners were (to a certain extent) knowledgeable of social-religious conventions that were vivid in central European elite culture.

As such, graves like Wijchen, Rhenen and – much further away – Court-St-Etienne (T.3, T.4 and T.A) are more similar to each other than to the majority of graves in their immediate vicinity. To some extent, this complies with the "cosmopolitan" nature and the "standardization" of actions that Jennings (this volume) sees as characteristics of (ancient) globalization. These practices may have been different and rare, but they are recurrent over a large region, during a longer period of time. All this suggests that there may have been an "awareness" of the shared, intra-cultural nature of these elite funerary practices that Steger (2003: 13) sees as a feature of globalization. The fact that such a supra-regional elite ideology practically disappears at the end of the Hallstatt D period is another indication. These globalized elite ideologies are based on long-distance contact and exchange networks. As Jennings (this volume) points out, they are therefore vulnerable to changes. With the dissolution of the central European Hallstatt elite network at the end of the Hallstatt D period (Cunliffe 1994: 347–51, 58), their northern counterparts decrease as well (Roymans 1991: 62–63).

All these deviating practices, however, were carried out or emphasized in burials that in general adhere to local norms. In all but one (Uden-Slabroek) these involved cremation of the deceased, and often also the deliberate destruction of items. Often objects, just like cremated skeletons, were incompletely deposited (Louwen in prep.; Van der Vaart-Verschoof in prep.). The burial monuments themselves, when known, do not deviate from local ones except that they tend to be much bigger. It is this translation of foreign practices and objects into local idiom that gives the northern European elite burials a markedly different outlook, to the extent that several elite burials were not immediately recognized as such during excavations (like Oss-Zevenbergen Mound 7). It may even have contributed to their near absence in discussions on Hallstatt elite identities on a European scale.

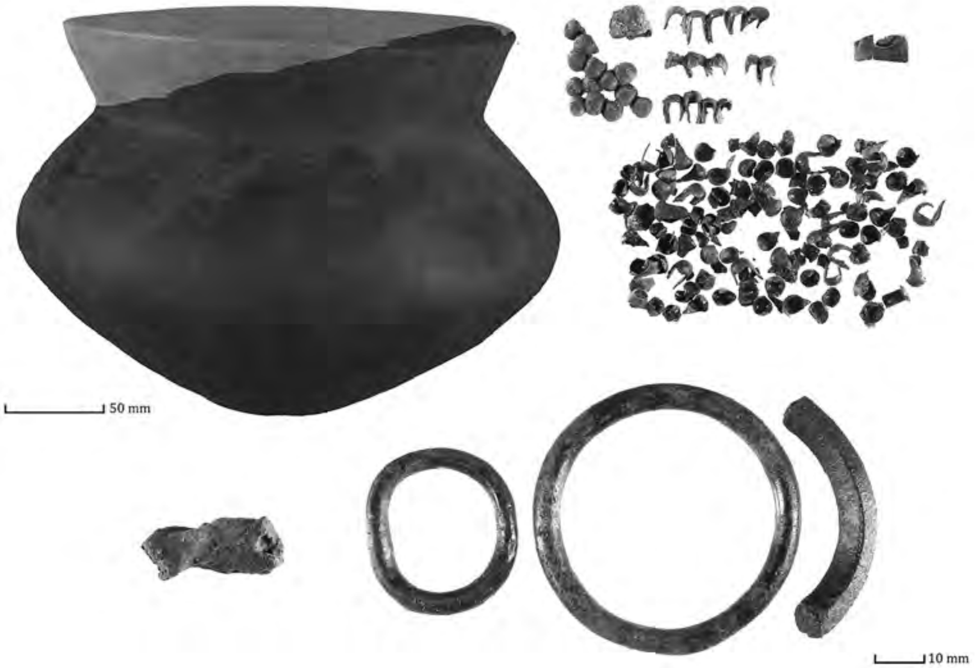

Figure 6.3.5 The finds from Oss-Zevenbergen Mound 7 (though note that there are over a thousand of the small bronze studs; photos by Restauratieatelier Restaura, Haelen)

Thinking these observations through, it seems doubtful that something like a "pure" foreign Hallstatt elite practice ever existed (cf. Stockhammer 2013 on the fallacy of "pure" and "hybrid"). A more realistic approach is to regard each individual elite grave – be it in central Europe or in the north, as the conscious expression of a community that reflected on its own place in a broader cultural-religious whole and made a statement on it to the audience and participants involved through the way the mourners carried out this particular burial (cf. Barrett 1994: 95–97). Thus, each new elite grave can be seen as a single building block in the construction of an overarching mortuary "Hallstatt" elite identity in its own right (ibid.: 96). It may have started with thoughts and considerations on what was the best way of acting, and it ended with a particular public performance that would have been remembered and talked about for some time by those who witnessed it. To cite Barrett (1994: 95), "tradition is enabling" but it was "carried forward in action and discourse of human agency". It seems therefore unproductive to see the "local" as some limitation that prevents the full expression of a "global" idea. It might be more realistic to see this melting pot of "local" and "foreign" as the very essence of what a globalized identity is (cf. Appadurai 2001: 6).

The inclusion of axes in lavish graves in the north group was argued to reflect a non-local belief. It was done, however, with axes that were probably not central European imports but probably produced in the region (like bronze Wesseling axes (Butler in Van Heeringen 1998) or an a-typical, faceted-socketed axe (Mariën 1958: 118–19). The *Schräghals* urns found in Meerlo and Oss-Zevenbergen Mound 7 (Figure 6.3.5) are different from the ceramics found in Court-Saint-Etienne to the south, but they are common in the local burial record (Mariën 1958; Verwers 1968; Fontijn *et al.* 2013c) and shapes of these vary between sub-regions.

Deliberate links with the local past also seem to have been made in the positioning of burials. Oss-Zevenbergen Mound 7 was built as an extension of a line of three Middle Bronze Age barrows (Fontijn *et al.* 2013b) and the huge mound of Oss was built on top of a Middle Bronze Age one (Fokkens and Jansen 2004: 133–35). Jennings (this volume) argues that "cultural heterogeneity" is another feature of globalization. Perhaps, in their attempts to deal with something out of the ordinary, the Early Iron Age mourners tried to make it normal by emphasizing local customs, roots and traits (cf. Fontijn and Fokkens 2007: 370). Awareness of the non-local nature of an idea, then, need not automatically lead to more uniform practices, but rather to actions that vary considerably from place to place (cf. Appadurai 2001).

Can exceptional events make globalization? Minorities and the 99 per cent

Thus, the search for intra-cultural shared practices among the elite graves ends up with a very small, non-uniform number of cases, of which the lavish graves are the best examples (Court-St-Etienne T.A, T.3 and T.4, (Mariën 1958); Limal-Morimoine T.1 (Mariën 1958); Meerlo (Verwers 1968); Oss (Jansen and Fokkens 2007); Oss-Zevenbergen M.7 (Fontijn *et al.* 2013a); Uden-Slabroek (Jansen *et al.* 2011); Rhenen (Van Heeringen 1998); Wijchen (Pare 1992); Van der Vaart-Verschoof in prep.). These are far less than 1 per cent of the Early Iron Age graves currently known here. The small numbers partly result from the fact that most chieftains' graves are chance finds or were excavated a long time ago, under unfavourable circumstances and particularly the iron items tend to be very poorly preserved. As suggested, variation is also caused by the destructive cremation rite, in which objects were not only burnt, but often also dismantled, fragmented and, frequently, incompletely deposited. Roymans (1991: 49) suggests that the presently known elite burials represent only 10 per cent of what once existed. However, even if this would hold true, the chieftains' graves would still be a tiny minority. The question remains whether such a minority justifies the use of the term "globalization" at all.

On the one hand, the answer should be "yes". While it is true that these graves are exceptional, they are not so much about an exceptional leader who may have entertained unique contacts with central Europe or the Mediterranean (cf. Fokkens and Jansen 2004: 85). Rather, they are primarily about the social construction of that leadership and about the knowledgeability of a much larger group of mourners on the cultural-religious ideas associated with that elite identity (cf. Barrett 1994: 66). After all, *they decided to bury the deceased in this particular, "globalized" way*. The immense size of the funeral monument of the Chieftain's burial of Oss (53 m in diameter, Fokkens and Jansen 2004: 133–35), and others (Mariën 1958) demonstrates how important this was to the communities involved. The observation that funerals with comparable traits (like including wagon parts and textile wrapping) were conducted several times in this region among separate groups (like the Meuse valley, the Dutch river area and the Scheldt Fluvial Basin), demonstrates that this was not a once-only historical event, but more ingrained in the thinking of communities in this part of Europe and in different sub-regions.

On the other hand, the answer should be a "no". Although Jennings (this volume) mentions "unevenness" as a trend in globalization, a focus on the eye-catching less than 1 per cent cases in globalization studies in general and in archaeology in particular is problematic. This chapter makes painfully clear that we try to make sense of the past by leaving the 99 per cent – to use the terminology of the modern anti-globalization "Occupy" movement – of other, urnfield graves an un-discussed, un-differentiated "block" against which we can offset the much smaller number of elite graves (cf. Louwen in prep.). This is particularly problematic if identities were polythetically rather than monothetically defined (cf. Van Rossenberg 2012: 22–3). The apparently intentional incompleteness of burial equipment suggests that identities were regarded as relational rather than representational (cf. Brück 2004). We should be open to the – in our eyes perhaps counterintuitive notion – that inclusion of only yoke decoration might have sufficed to associate a deceased individual with ideas and values of "Hallstatt eliteness". This creates new interpretative problems: a grave with an element of horse-gear or a small part of a wagon tends to be included in archaeological discussions on Hallstatt elite identities, but graves with, for example, tweezers are not. Tweezers, however, are known in Hallstatt elite graves like the one from Rhenen. On what grounds are we to decide which kind of items were perceived as defining elite identities at death (cf. Čivilyte on Bronze Age warriorhood without weapons 2007)? Future research on the contemporary, somewhat disregarded normal urnfield graves should redress this balance, and find out how many other kinds of intra-culturally shared practices there may be among this 99 per cent (e.g. Louwen in prep.).

More than anything, globalization is about how people perceive themselves as part of the wider world – this requires a holistic, inclusive archaeological perspective. Exotic and out-worldly as the Wijchen wagon may have been, it ended its life in a decidedly local ritual, consumed by fire – with elements further transformed through destruction – and it came to rest near the graves of the 99 per cent.

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6.4

Connectivity and social change

Roman goods outside the Empire (100 BCE–400 CE)

Mariana Egri

Introduction

Numerous artefacts of foreign origin were recovered from a wide variety of indigenous sites in temperate Europe dated between the late Republic and the late Empire (using a conventional Rome-centred chronological framework). They appeared in domestic, funerary or sacred contexts, frequently associated with locally sourced goods, and were sometimes modified or, more often, imitated.

Archaeologists have identified two major trends related to their presence beyond the formal imperial border. First, their distribution was uneven through time and from one region to another, and finds tended to concentrate in locations that developed regular and/or intense connections of various kinds with the Mediterranean world over a shorter or longer period of time. Their assemblages were rather heterogeneous in what concerned artefacts' origin and function, and often contained a large percentage of hybrid forms, suggesting a culturally and ethnically diverse population that took advantage of a wider range of available contacts and experiences. Away from these centres, both the number and the diversity of finds were usually reduced, indicating both a restricted access to supply networks and limited interest in foreign goods, as determined by geographic, economic or cultural factors. Second, each community seems to have preferred particular categories of foreign goods and these were more often than not used in ways and contexts that differed significantly from those in the Roman world.

These patterns point to a significant social, cultural and economic impact of the Roman world beyond its formal borders due to increased connectivity, though what this impact has meant for each of the involved parties is still debated. The main question is whether globalization can be used to discuss the localized variations in the perception of Roman culture far away from its original lands, as well as the gradual infiltration of certain indigenous elements into the provincial lifestyle, practices and concepts. This chapter aims to answer to this question by examining the archaeological evidence on the basis of a set of trends associated with globalization (see Jennings, this volume). Since the volume of available data from temperate Europe is huge, the present analysis focuses its consideration on the indigenous communities between the eastern Alpine region, the middle Danube, the western Baltic and southern Scandinavia (Figure 6.4.1).

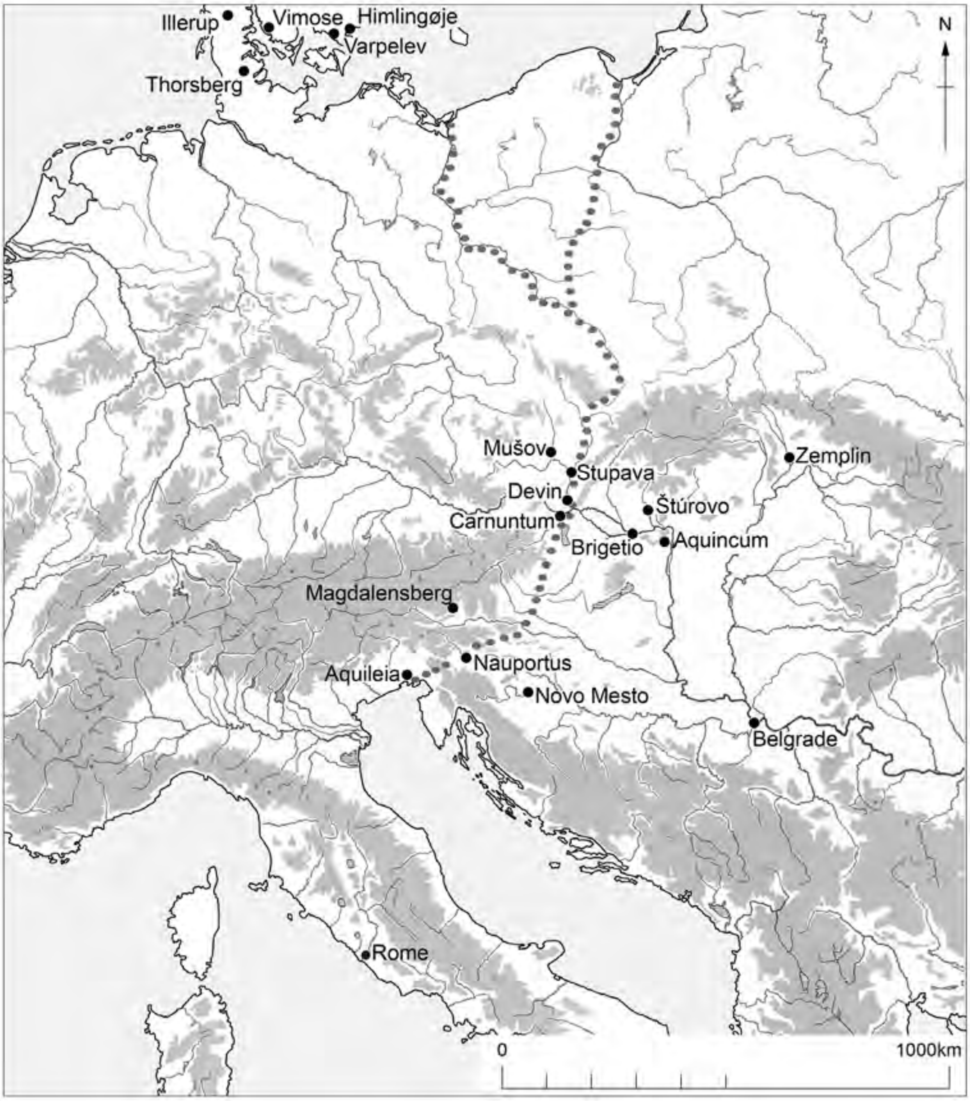

Figure 6.4.1 Map of the region with the sites mentioned in text (dotted line is the Amber Road)

A short theoretical overview

For a long period of time, the presence of Mediterranean goods in temperate Europe was studied within the framework of acculturation, a concept which usually implies an unequal relationship between a powerful, "civilized" socio-political entity and a weaker, "primitive" one, the latter naturally seeking to emulate the material culture, practices and ideologies of the former (Stein 2002: 905). Within this approach, trade was considered to be the main means of acquisition, followed by occasional diplomatic gift exchanges and military actions, while very little attention was paid to the localized processes of selection and appropriation (for the critique of this interpretative model see, for example, Woolf 1997, 2009; Hingley 2005; Ekengren 2009: 15–29; Galestin 2010). This interpretative model continued to appear in various guises in archaeological studies that discussed the impact of Roman culture beyond its formal frontiers, notably in the "core–periphery" concept and its derivate, the "prestige goods economy" (Rowlands 1987; Champion 1995; a summary in Stein 1998). One result was the attempt to correlate the socio-political development of different indigenous communities from temperate Europe with the intensity of their contacts with the Mediterranean world. However, this approach was subsequently criticized for putting too much emphasis on foreign objects, while the internal socio-political and economic structural transformations experienced by many local communities tended to be overlooked (e.g. Gosden 1985: 489–91; Dietler 1998: 295–98; Woolf 1993; Pitts 2010: 32–34).

So-called network theory offers an alternative approach that looks for structures which facilitate the development of intensive connectivity at different spatial and social scales, and, consequently, is less focused on economic factors or elite actions (Brughmans 2010; Collar *et al.* 2015; Knappett 2011, 2013 and this volume). Network analysis provides a series of useful tools that helps our understanding of the variable spatial, social and cultural dynamics of human interactions and their equally different outcome. A step forward is the use of globalization as an interpretative framework, since it allows a shift away from useless broad categorizations, like Roman versus indigenous, province versus metropolis or even Romanization versus resistance, to a more constructive approach that discusses means and mechanisms of communication, transfer and transformation which functioned at various spatial and social levels, influencing all of the involved parties.

It has recently been demonstrated that the concept of globalization can be successfully employed in the analysis of the Roman Empire as a complex and dynamic socio-political, economic and cultural entity that either ruled directly or influenced almost the entire world known in its times (see different approaches in Witcher 2000; Hingley 2005; Hitchner 2008; Pitts and Versluys 2015; Nederveen Pieterse 2015: 239–47). In this context, it has to be noted that there are more than two parties involved in the shaping of these interactions. On one side was the Roman state, itself not a totally unified entity, which included a diversity of agents, each having its own interests and means of action. One illustrative example is the Roman army, whose clearly defined identity and organization influenced significantly the formation of the concepts about Romanness in frontier zones. Its impact can be felt on various local features that contributed to this formative process – the transportation system, the military control of the local traffic and supply networks, or of certain manufacturing activities, the outposts or the veterans.

Then there were several indigenous populations from temperate Europe, having different socio-political and economic structures, which were gradually incorporated into the Roman state; many were first "contested peripheries" and some developed into frontier communities that played an important role in the interactions with the "barbarian" world. These populations brought in a diverse social and cultural baggage, which included practices and concepts perceived as traditional, as well as the results of their own experiences of interacting with the Roman world.

One consequence of gradual Roman expansion is that other indigenous communities, which were never formally incorporated into the Roman state, more often got in contact with elements and actors of different provincial cultures and societies, including here the Roman army, which shaped their understanding of Romanness. At the same time, their own socio-political, military and economic structures influenced the manner in which they interacted with the outside world, and more specifically, their reaction to the Roman expansion.

Regional networks and spaces of interaction

Several structures and means of communication and exchange contributed to the development of multiple dense and far-reaching connectivity from the late Republic to the late Empire between the Mediterranean and the temperate Europe. Some of them were the result of Roman expansion, while others were created and maintained by indigenous communities before this expansion. For example, the Roman state influenced the gradual development of a dense transportation system that included carefully maintained land roads, usually built by the army, major waterways, and maritime and fluvial ports. This system took over several traditional routes from temperate Europe, which predated the Roman expansion, for example the Amber Road connecting northern Italy with the Baltic region, or the waterways that followed the valleys of many major European rivers. The Roman transportation network was primarily used for military purposes, to send troops and supplies quickly and efficiently, though it also facilitated the circulation of civilians, as well as goods, practices and ideas. One consequence was the development of several nodes of interaction – crossroad settlements, supply bases, markets and ports – which became social and cultural melting pots due to their particular location and functions, attracting a diverse range of people and facilitating the transfer and transformation of various practices, concepts and meanings. Some of these nodes of interaction already functioned before the Roman expansion, at certain important crossroads or access points alongside the aforementioned traditional routes, several being taken over and expanded under Roman control.

The eastern Alpine region, which played an important role in the first major northward expansion at the end of the Republic and the beginning of the Principate (Horvat 2008: fig. 1; Egri 2008: 20–23; 2009), provides an illustrative example for the manner in which existing regional connectivity was taken over and expanded under Roman control. The local communities already had regular contacts with the Italic Peninsula well before these events through the Ocra (Razdro) Pass, which was crossed by the aforementioned Amber Road (Horvat and Bavdek 2009). The establishment of the colony of Aquileia in the late second century BCE further expanded the range of contacts, facilitating an increasing flow of people and goods in both directions. The Roman merchants were primarily interested in getting better access to iron sources from Noricum, although other metals, Baltic amber and probably timber were also traded. Strabo (7.5.2. C314; Jones 1924) also mentions cattle and slaves coming from this region, though these are difficult to identify archaeologically. In exchange, the merchants brought over manufactured goods, mainly tableware, wine, jewellery and garment accessories.

The eastern Alpine network included Nauportus, in modern Slovenia (Horvat 1990, 2008; Mušič and Horvat 2007; Egri 2009), an indigenous settlement, which was taken over during the late Republic by merchants and craftspeople originating mostly from Aquileia upon some agreements with the local chieftains. Archaeological investigations unearthed several structures – the port, docks, horrea, workshops – that point to its importance as a regional trading and manufacturing centre. The settlement also served as a major supply base for the advancing Roman army during Augustan and Tiberian times (Horvat 2008; Mušič and Horvat 2007; Egri 2009). Contemporaneous household inventories are heterogeneous, usually combining local kitchenware with imported tableware and often including items specific to the Mediterranean lifestyle, like *mortaria*, writing instruments or oil-fuelled lamps (Horvat 1990: 232–34, table 6; Mušič and Horvat 2007; Egri 2008: 52–53). These assemblages indicate that Nauportus was quite well connected with, and integrated into, the regional networks of exchange and communication in spite of its frontier location. Furthermore, at least some of the indigenous inhabitants had the opportunity to experience certain Mediterranean habits through close contacts with incoming individuals, while also providing locally produced goods for this diverse community.

The impact of Nauportus and its developing network of connectivity can be also noted archaeologically on a wider area northward along the Amber Road, as well as eastward along the Sava valley and down to the confluence with the lower Danube. To the north, the eastern Alpine network reached Magdalensberg, in modern Austria, another major trading and manufacturing centre which, according to the epigraphic evidence, included a sizeable Italic diaspora during the late Republic and Augustan–Tiberian times (Dolenz *et al.* 2008a, 2008b; Scherrer 2002: 13–30). As in the case of Nauportus, extensive archaeological investigations unearthed several structures that point to the settlement's economic importance, mainly related to iron mining and manufacturing, as well as to its ethnically and culturally diverse population. This diversity can be also noted in a series of ceramic assemblages dated to the Augustan–Tiberian period, which contain a mixture of Italic imports and locally produced ware. Even more important, the latter category includes not only traditional "Celtic" forms, but also vessels combining local and foreign features, notably tableware that resemble Italic forms although using grey and black fabrics which characterized Late Iron Age (hereafter LIA) ceramic production. Furthermore, the common presence of drinking sets whose functional structure resemble the indigenous ones, while including forms "inspired" by northern Italic ware, seems to suggest a perpetuation of some traditional convivial practices even when *terra sigillata* tableware became quite popular (Schindler-Kaudelka 2002; Baur and Schindler-Kaudelka 2015).

During the Principate, the military structures that were at the forefront of Roman expansion and then contributed decisively to the frontier's consolidation also played an important role in the interactions with different communities from temperate Europe. The impact of the army can be noted especially in the frontier zones, which were very dynamic spaces due to the melting pot of multiple indigenous and incoming groups and individuals (Wells 2005: 49–51; Gardner 2007; Whittaker 2009: 193–94; Woolf 2009: 209–11; Hingley and Hartis 2011; Egri 2014a). These structures also included a series of outposts and supply bases established beyond the formal frontier, whose main scope was to control access routes or to support military expeditions while also strengthening the frontier's defence (Figure 6.4.2). Nevertheless, almost all of these outposts served more than one purpose throughout their existence and hosted a wide variety of individuals and groups with different interests and means of action. Northward, at the middle Danube frontier, the functions of several structures built with Roman materials, including bricks bearing military stamps, or displaying a Roman-inspired layout are still debated (a summary of different opinions can be found in Grane 2007a: 46–49; Komoróczy 2009). As part of the frontier zone, these outposts were also nodes of interaction that facilitated the intensive circulation and transformation of different goods, practices and ideas. Some of them were part of the ongoing policy that sought to expand Roman authority and control across the formal frontiers, together with other military and diplomatic means, like the maintenance of local alliances through a system of *stipendia*, privileges and personal relationships, or the imposition of "friendly kings" (Braund 1984).

Alike to Roman forts inside the provinces, the outposts also attracted different individuals and groups seeking to take advantage of the military presence to pursue their own interests. The highly militarized frontier zone and the soldiers' lifestyle already had an important impact on the indigenous communities from the neighbouring areas through recruitment or trade relationships, or simply by sharing public spaces like markets, road and custom stations or even sanctuaries. These close contacts led to an increased access of the locals to a wider range of specific goods brought over mainly by the military supply networks. For example at Štúrovo (modern Slovakia) and in its surroundings, the analysis of Roman provincial ceramic finds points to the existence of three main supply networks which connected the area with Pannonia through the large frontier settlements at Brigetio and Aquincum between the middle of the second century

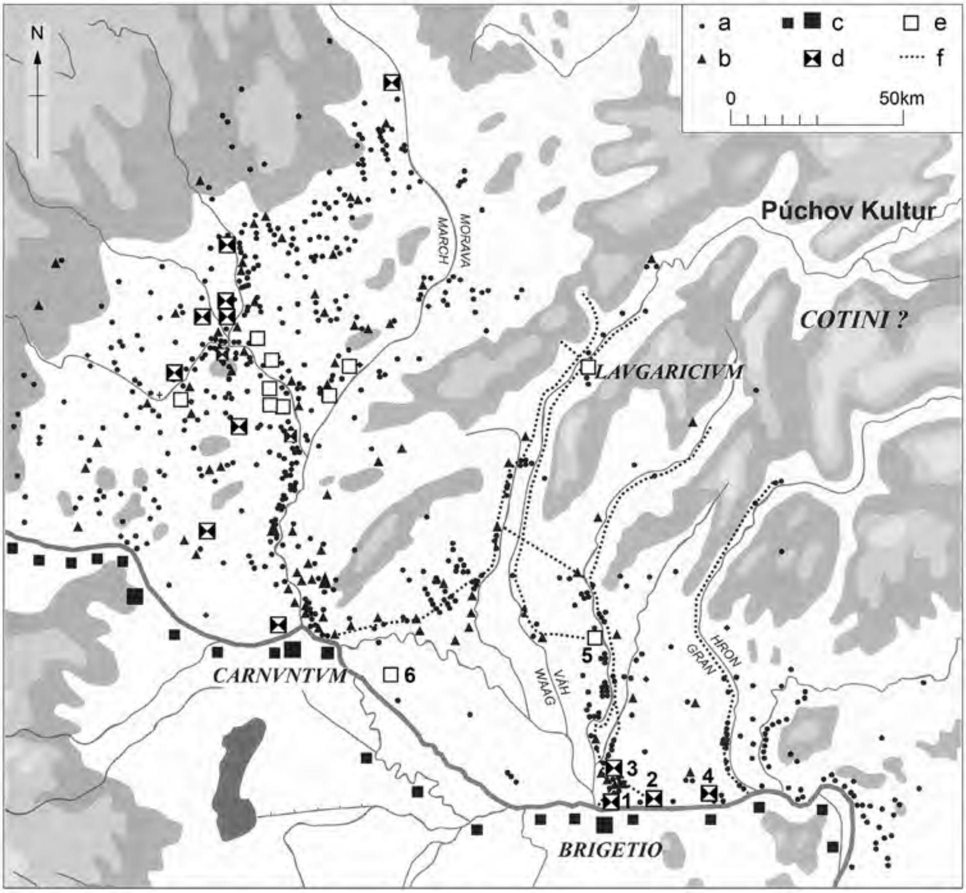

Figure 6.4.2 Map of the middle Danube frontier region: (a) indigenous settlements; (b) indigenous burials; (c) Roman frontier forts; (d) identified Roman temporary camps; (e) presumed Roman temporary camps; (f) presumed Roman marching routes (after Rajtár 2008). Courtesy of Dr Ján Rajtár, Institute of Archaeology Nitra, Slovak Academy of Sciences

and the early fifth century CE (Beljak and Kolník 2007). The same analysis identified the range of "Roman" vessel shapes preferred by local consumers, the most popular (deep and shallow bowls, large jars, pitchers and beakers) being frequently imitated and adapted to the local culinary and convivial practices. These included not only several Pannonian products, but also central and eastern Gallic *sigillata* tableware, especially decorated Dr 37 type bowls. However, it has to be noted that the percentage of ceramic imports remained rather low in all settlements throughout the entire period in question.

Another example that illustrates the importance of Roman army as a connecting factor is provided by the Roman legionary fort and the nearby urban settlement at Carnuntum in modern Austria (Kandler *et al.* 2004), established in the close vicinity of a LIA settlement on the right bank of the Danube (Jobst and Urban 2002), which became the focal point of the entire region (Figure 6.4.2). The surrounding area was already characterized by intensive regional interactions during the LIA due to the major crossroad between the Amber Route and the middle

Danube valley with its tributaries (Ramsl 2003: 256–57, fig. 11; 2010; Pieta 1996: 183–85). This network of communication and exchange remained in function throughout the entire provincial period, being expanded by the Romans to facilitate the increased circulation of goods and people both across and along the frontier. Furthermore, the social, economic and demographic impact of Carnuntum across the frontier can be noted in the gradual development of a dense network of indigenous settlements from the early first to the third century CE. Their regular and diverse contacts with the province are demonstrated by the wide variety and numbers of imported goods identified in several domestic and funerary inventories. The large majority of these objects were incorporated into local culinary, convivial or ritual practices, merely replacing those locally produced that had similar functions. It seems that the local population was most likely attracted by the frontier and its major centres due to economic opportunities, some of the communities supplying regularly the army with agricultural produces and cattle (Tejral 1995; Stuppner 2002; Kolník 1991, 2004; Grane 2007a: 45–49; Vrba 2008: 50–58).

Another aspect that points to the higher impact of increased connectivity across wider areas concerns the northward distribution patterns of certain Roman goods, which seem to indicate that the middle Danube indigenous communities might have played a role in their circulation between the Empire and different populations from the Baltic region and southern Scandinavia (Bouzek and Ondřejová 1990; Kolník 2004; Grane 2007a: 271–72). The main categories of Roman finds found in the latter regions consist of metal, glass and occasionally ceramic vessels, weapons and military equipment, harness fittings, jewellery and garment accessories. The large majority of them were recovered from burials and sacrificial contexts, thus leading to various interpretations concerning both the means of acquisition and their practical and symbolic functions in the local environment.

Some specialists have argued for a series of direct contacts between the Roman Empire and southern Scandinavia, even suggesting a direct intervention of the former in the establishing of regional centres of power after the Marcomannic Wars, for example at Himlingøje in eastern Zealand (Storgaard 2001; Jørgensen 2001: 12–18) though this interpretation was sometimes contested (a summary in Ekengren 2009: 35–36). Consequently, the Roman goods were interpreted mainly as diplomatic gifts or *stipendia* received by different chieftains, who might have redistributed them within the local networks of communication and exchange (Grane 2007a: 154–63 and 269–72; 2010). Along the same line, some of these leaders could have provided troops for certain Roman campaigns especially during and after the Marcomannic Wars and later in the fourth–fifth centuries CE; the returning soldiers could have brought back weaponry and coins, and perhaps also fine tableware. Alternatively, these goods, which were widely available in the frontier provinces, could have also travelled northward through the regional networks of exchange and communication that were mediated by the indigenous communities of the middle Danube region (Pauli Jensen 2013a; Grane 2007b: 96–99; Przybyła 2010).

Foreign goods – local consumers

Aside from a variety of forms of connectivity that were developed between the indigenous communities from temperate Europe and the Roman world, there is also a diversity of practices, beliefs and motivations that shaped the localized processes of appropriation of the Roman material culture. For example, during the late Republic and Augustan times, several indigenous communities living eastward alongside the Sava and Drava valleys gained an increased access to goods of Italic provenance, more likely through their pre-existing connections with the eastern Alpine region (Rustoiu 2005: 75–81; Egri 2012: 506–07; Mihajlović 2014: 196–99; Dizdar and Tonc 2013; 2014: 590–92). However, there are significant differences in the number and range of imported goods from one community to another, as well as in the manner in which they were incorporated into local domestic, ritual and funerary practices. These variations mainly reflect local social and cultural particularities and interests, though in some cases they were also a consequence of the differences in the nature of contacts with the Roman supply networks. For instance, archaeological evidence indicates that certain social groups belonging to the Scordiscian communities sought particular types of imported metal vessels, mainly beakers, buckets and ladles, which were included in some funerary assemblages alongside locally sourced goods, foodstuffs and beverages (Popović 1992; Dizdar and Radman-Livaja 2004; Dizdar and Tonc 2014; Mihajlović 2014: 196–99). The vessels could have been acquired directly from the merchants who travelled along the Sava valley, while others could have been exchanged or redistributed within the regional networks of power and authority; a few could have also been part of some diplomatic agreements with representatives of the Roman power (Rustoiu 2005: 75–81; Mihajlović 2014: 199–207; Dizdar and Tonc 2014: 590–92). The functional and symbolic structure of these assemblages, which were markedly different from the Italic ones, suggests a restricted consumption style, sometimes within a convivial "hierarchy" determined by the local socio-political structures of power and authority (Egri and Rustoiu 2008). Consequently these vessels acquired new practical and symbolic functions and meanings, in which their "distance-value" or means of acquisition could have also been relevant. It should be noted that other categories of Mediterranean goods were far less popular and their number and variety only increased after the beginning of the firts century CE, when some of the local communities got involved in the Roman military operation towards the middle Danube, thus gaining more regular access to military supply networks (Egri 2008: 85–90; 2016).

On the other hand, the indigenous communities from the Dolenjska region in modern Slovenia, which became allies of the Romans during the Augustan period, seem to have preferred a wider range of foreign goods, which included metal and ceramic tableware, garment accessories, jewellery and weaponry (Knez 1992; Božič 2008; Egri 2012: 505–7). It can be presumed that their early direct access to the military supply networks and also the much more regular contacts with the Romans more likely influenced these choices. Furthermore, archaeological evidence indicates that the use of imported goods and foodstuffs was not confined to elites, although metal vessels tended to be associated mainly with weaponry in funerary contexts. Moreover, the imported goods almost always replaced locally produced objects, having similar functions in funerary contexts which were otherwise traditional in terms of rite and ritual (Figure 6.4.3). The main aim seems to have been to preserve and reiterate a particular manner of expressing individual and group identity that was relevant within the local environment, and in this context the occasional association with Rome was merely an additional element that contributed to indigenous concepts of status, power and authority (Egri 2012: 505–7 and 514–15).

Along the same Sava valley, certain types of foreign brooches display a more diffuse distribution within the local society, indicating that new styles of costume and bodily ornamentation originating mostly from northern Italy became widely available during the first century BCE and early first century CE (Dizdar and Tonc 2013; see also Božič 2008: 45–110). The demand for such objects seems to have led craftspeople to imitate them more-or-less closely, even creating variants influenced by certain local brooches perhaps as part of the process of appropriation. Some of these variants even "travelled" farther northward in Pannonia and eastward in Dacia, more likely as personal belongings or occasional purchases though the activity of some mobile craftspeople cannot be excluded. Their widespread distribution more likely illustrates the intensity of human mobility between northern Italy, the western Balkans and the middle and lower Danube during the period in question, as well as the variable degree of flexibility in what concerns the local styles of costume and bodily ornamentation.

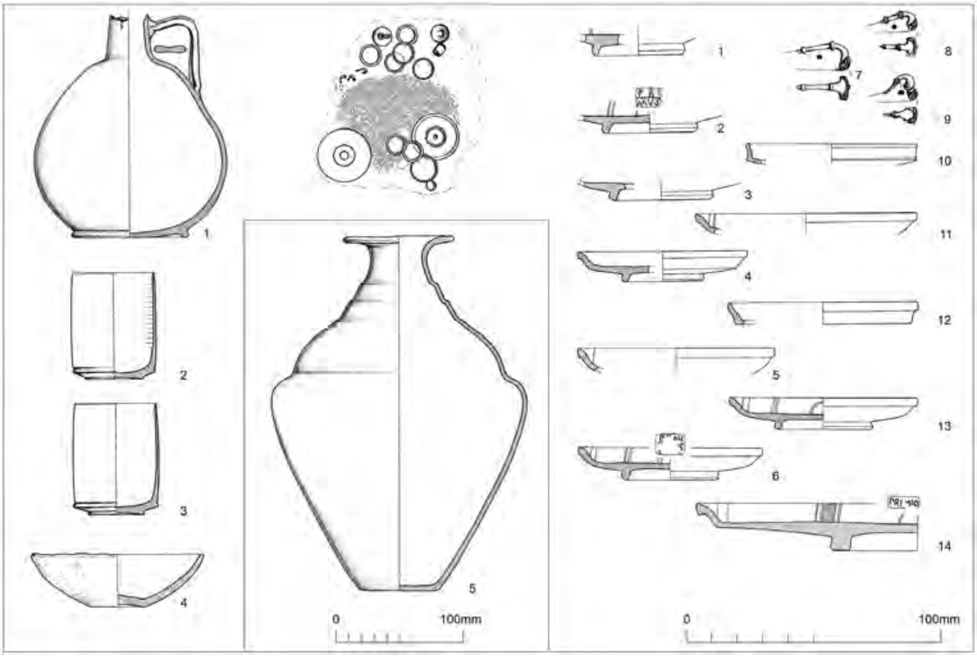

Figure 6.4.3 Inventory of grave 55 consisting of indigenous and Italic grave goods from Novo mesto-Beletov vrt, Slovenia (after Knez 1992). Courtesy of the Museum of Dolenjska, Novo mesto, Slovenia

The practical and symbolic functions and meanings of the Roman objects found in southern Scandinavia are also a matter of debate. Some scholars previously interpreted them as prestige goods which more-or-less maintained their original functions and meanings in the indigenous environment. More recently, it was sometimes suggested that the returning soldiers also brought over certain convivial practices, as well as weaponry and garment accessories, taken over in the Roman military environment (a summary in Ekengren 2009: 15–17). However, this interpretation is now largely contested, bringing instead into discussion the particularities of the local contexts of consumption in which foreign objects were used together with numerous locally produced goods. For example, in funerary contexts the Roman metal and glass vessels were incorporated into the indigenous rituals alongside locally sourced goods and foodstuffs, as part of a specific narrative related to the localized concepts about death, identity and transformation of personhood (Ekengren 2009: 110–22).

In the same region, the so-called war booty sacrifices (Figure 6.4.4) consisting mainly of weapons and military equipment placed in bogs, like those from Thorsberg, Vimose and Illerup, have also led to different interpretations. The inventories were seen either as booty resulting from wars waged in distant territories, against or along the Roman army, or as the military equipment of defeated invaders. More recently these were related to the activity of the former auxiliary soldiers who returned home and offered the results of their exploits to the local gods, combining the practice of bog sacrifices with the Roman concept of military trophy. To date, none of these hypotheses has dominated, mostly because the precise date of the sacrifice and the entire structure and inventory of the offerings are difficult to identify (Grane 2007a: 240–49). Still, another aspect perhaps deserves to be underlined here – the incorporation of Roman objects into a ritual practice that was specific for the southern Scandinavian environment. In this

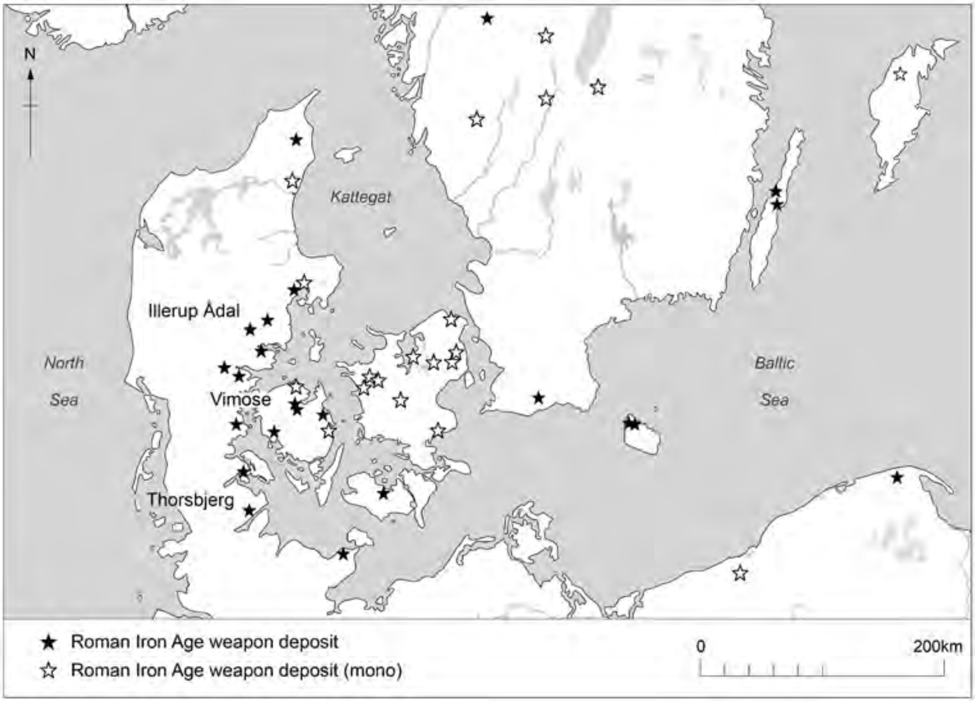
N
Kattegat
Illerup Ådal
North Sea
Vimose
Thorsbjerg
Baltic Sea
★ Roman Iron Age weapon deposit
☆ Roman Iron Age weapon deposit (mono)
0
200km

Figure 6.4.4 Distribution map of southern Scandinavian weapon deposits (single and multiple finds) (designed by X. Pauli Jensen). Courtesy of Dr Xenia Pauli Jensen, National Museum of Denmark

case it can be presumed that mostly their martial qualities were relevant in a period witnessing an increased interest in the warrior as a social-political institution (Pauli Jensen 2009), whereas their origin was less important.

Some of the weapons and military equipment produced in the Germanic environment, for example, certain types of swords, skilfully copied the Roman ones. In other cases, only some details were taken over and the resulting products are interpreted as hybrids created in contact zones, responding to particular demands. Lastly, a few military fittings, mostly Roman balteus parts, were sometimes transformed into completely different objects (pendants or brooches). Another notable example in which elements having different origins were combined to produce new objects is provided by a series of belts produced in the Germanic environment, which included Roman balteus fittings (Pauli Jensen 2013a, 2013b, 2014; Grane 2007b: 96–99; Przybyła 2010). While these practices may have alluded to the owner's service in the Roman army, or to the desire to replicate certain elements of the Roman officers' equipment, another plausible explanation could be related to some attempts to improve the existing military equipment in the context of changing battle techniques.

A similar process of combining local and foreign details can be noted in the case of a group of silver drinking vessels discovered in different graves from the same region (Figure 6.4.5). All of them combine Mediterranean shapes with local manufacturing techniques and a series of decorative details that are frequently encountered on the local ceramic. Initially, these vessels were considered not more than rather crude imitations of some Italic prototypes, produced as part of some emulative trends. However, by deconstructing the conceptual processes that

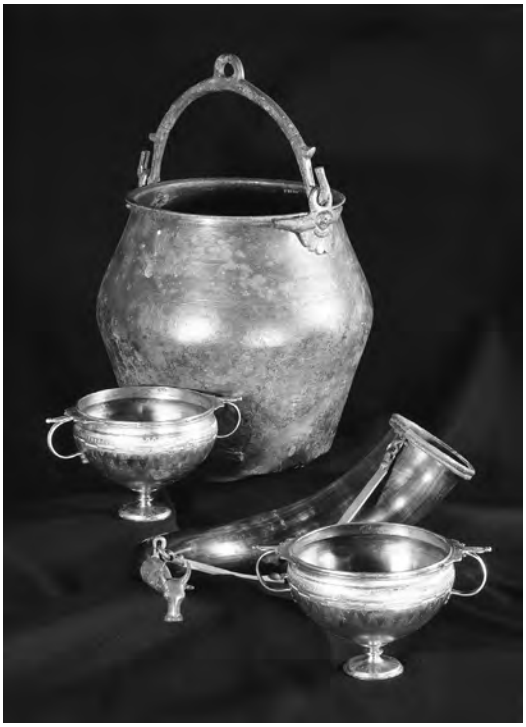

Figure 6.4.5 Metal vessels from grave A2 at Dollerupgård, Kolding municipality, Denmark. Photo Lennart Larsen, National Museum of Denmark

led to their manufacturing, it has been recently suggested that they should be seen as a visual expression of a series of successive processes of appropriation and validation that accompanied the social and cultural interactions in which the local consumers were involved through time (Ekengren 2009: 127–58).

Another illustrative example includes the Roman coins that were discovered in different contexts from the Baltic region and southern Scandinavia as single finds or hoards. It has been considered that the *denarii* reached the region mostly as *stipendia* paid to the local chieftains or as individual payments received by local men who may have served as auxiliaries in the Roman army, mainly after the Marcomannic Wars. However, a significant number of coins seem to have reached the region through the inter-community networks of exchange and communication with the middle Danube region, as gifts, booty, tribute or dowry. At the same time, the unusually large number of *sestertii* from the south-eastern Baltic region was considered to be the result of the amber trade with the Empire, the local communities preferring the bronze coins due their larger size and shiny appearance (Bursche 2002: 121–22; Zapolska 2013: 106–08; Dymovski and Myzgin 2014). However, the Roman coins were rarely used as proper means of payment outside the few large commercial centres. Instead, archaeological evidence indicates that they might have had other non-commercial functions, being hoarded as family or tribal heirlooms, or redistributed as diplomatic gifts, tribute, ransom, dowry and votives, or even used as personal ornaments, mostly as pendants. Along the same line, fourth and fifth-century CE Roman medallions, usually given to worthy soldiers, were first imitated and later adapted as bracteates which were mostly used by women – hybrid jewellery which incorporated local and

Roman cultural features and practices (Wicker 2016). It seems that in the local environment, the Roman coins' functions and meanings were most likely related to their material, appearance and iconography, the real or imagined provenance and the localized practices related to certain metals, while having almost no connection with their face value.

The glocalized Roman world

An important observation that results from the examples presented above is the need to operate with different analytical categories in order to understand the impact of the interactions between the Mediterranean and temperate Europe, moving away from stereotypical oppositions like Roman–Barbarian or metropolis–province. From this point of view, it is more useful to discuss networks, zones and mechanisms of interaction that appeared and evolved in particular socio-political, economic and geographic conditions, connecting a wide variety of individuals and groups, with different interests and means of action. Thus several imperial, provincial and "barbarian" agents created and/or maintained arrays of increased connectivity across temperate Europe, which in turn generated a series of social and cultural changes that fit the globalization criteria. The Empire provided the socio-political, administrative and economic framework in which the interactions took place, but the choices were in the hands of different groups and individuals. The impact of this connectivity was felt on all sides, including the Roman provinces, mainly due to highly mobile individuals and groups like the soldiers, merchants or craftspeople. These people were not just "moving" things and concepts around, but they also transformed them in the process, adding or inventing new functions and meanings, thus localizing the apparently uniform idea of Romanness.

It has to be also noted that the intensity of these interactions and their impact were uneven. The large numbers and diversity of foreign goods recovered from the frontier zones, and, even more importantly, the manner in which they were used in different circumstances, quite clearly indicate that these communities played a distinct and very important role in the circulation, appropriation and transformation of concepts, practices and ideas originating from the Roman world. As a consequence, these communities developed their own rather heterogeneous collective identities and accompanying sets of practices, which often resist current neatly defined classifications based on location or disputable ethnic labels.

At the same time, frontier communities frequently shaped the understanding of the Roman world amongst the indigenous communities living deeper inland and lacking regular contacts with the provinces. Many pre-existing networks of exchange and communication that connected the indigenous communities beyond the imperial borders were largely maintained throughout the entire period in question though some disruptions were caused by population movement. Others appeared outside formal Roman control, often seeking to resist its influence and pursuing different interests by reasserting or even inventing local traditional practices and structures, so other agents should be also considered alongside Roman imperialism.

The apparent re-emergence of various – especially funerary – traditions, which were often matched by the inventions of others, can be also noted among the frontier communities, which were more closely connected with imperial structures. Albeit these trends are more subtle than in far-away communities, often incorporating certain Roman goods and practices, they can be seen as attempts to maintain social cohesion by appealing to a real or mythical past especially during periods of intense social-political transformation.

It can be therefore concluded that archaeological evidence points to several trends associated with globalization: the space–time compression, the dominance of standardized socio-political and administrative structures, the uneven development and complexity of connectivity, the localized variability of many concepts and practices and the re-emergence of traditions. All of these suggest that this analytical framework could be more suitable for investigating interactions between the Roman Empire and various indigenous populations from temperate Europe; it is not hampered by artificial hierachizations of involved parties, but brings into consideration different regional patterns.

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6.5

Urbanism and exchange in the North Atlantic/Baltic, 600–1000 CE

Søren M. Sindbæk

Introduction

By 600 CE, the islands and coasts by which northern Europe merges into the North Atlantic and the Baltic Sea were culturally and socially almost a world to itself. Trickles of exotic objects, such as Indian amethyst beads or Red Sea cowrie shells, marked the existence of global flows of material culture, which spread by long and roundabout chains of intermediaries, mainly through western Europe and the Mediterranean. It is doubtful if people in northern Europe had any clue as to the real-world origin of these objects, and their involvement is likely to have been limited to the last of many steps in their exchange. This situation was to change. By 1000 CE, sailors from this part of the world were exploring the coasts of Greenland and Newfoundland for walrus ivory and other high-value commodities to be brought back to urban markets in their homelands, while merchants from the same market towns were trailing successful trade routes to the Black Sea and the Caspian for commerce in slaves, silk and silver. The experience of northern European societies during this period, including the Scandinavian Viking Age, highlights two patterns in the pre-modern path towards globalization: first, the agency and social incentives, which generate transcultural interconnectivity, issue from "marginal" actors and societies as much as from "core" ones and may lead perceived peripheries to take on a pivotal role. Second, the trends towards global connectivity, then as now, follow a punctuated pattern: the willingness to invest energy and resources in communicating with societies at the edge of the known world, or beyond, thrives from imagined as much as from perceived gains – and is often adjoined by periods of disappointment, disinterest and cultural detachment from the globalizing process.

The maritime matrix

From the point of view of the powerhouses of western Eurasia, northern temperate Europe, including Scandinavia, the Baltic Sea region, and much of the British Isles, remained a fringe of the world to the end of Antiquity. Like sub-Saharan Africa, East Asia, and the mass of land beyond the fringe of the Black Sea, these realms were economically and culturally marginal to the Ancient Mediterranean civilizations and mostly beyond the curiosity of its scholars. Isolated expeditions met societies with limited economic specialization and complexity (Cunliffe 2002). In the words of Gaius Julius Caesar, Europe north of the Rhine was a world of "scarcity, indigence, hardihood" as yet without the "knowledge of commodities from countries beyond the sea", which made neighbours closer to the Romans eager to collaborate for "many things tending to luxury as well as civilization" (*Bellum Gallicum* 6:24; Edwards 1917). The northern climates did not yet sustain rich elites who might form economic or political partnerships with the masters of the Mediterranean world – albeit they tacitly contributed resources in terms of traded exotics, such as amber or fur and migrant humans, including slaves.

Classical authors, like Caesar, looked down on the "barbarians" as culturally and economically inferior; yet they were also prone to interpret, and sometimes praise, their way of life as a cultural rejection of a dominant, foreign civilization. Throughout the first millennium CE (and in many regions well into the second), societies in Scandinavia and around the Baltic Sea operated beyond the world of walled cities, professional armies, taxes and record-keeping bureaucracies, which had shaped the social order across western and central Europe since at least the Roman conquests in the first century CE (Wickham 2006). These were realms of what Ancient Roman and Greek authors called Barbarians and proponents of World Systems Theory would term a periphery (Harding 2013). Even where populations were moderately dense, they were entirely rural. Clusters of settlement in the Baltic Sea coasts and Islands, around the great lakes of middle Sweden, in the fjords of Norway and along the coasts of Denmark were separated by vast, sparsely inhabited forests and mountains.

Even so, northern Europe had one outstanding geographical advantage over many similarly thinly inhabited areas of the world: this was a realm of islands and peninsulas bordering several great seas, and its populations clustered on its coasts and waterways. While the original attraction of the sea was as a reservoir of food, the predominance of interaction by means of sea transport also offered connectivity. As long as seafaring was restricted to coastal journeys by sewn canoes, its effects were mainly to extend social integration along sea-lanes, leading to extensive areas of cultural and linguistic homogeneity. But when the technology of sea transport expanded to include (in that order) large plank-built boats (fourth century CE), the use of costly textile sails as a means to propel vessels across open sea (eighth or possibly seventh century CE), and the construction of specialized bulk-carrying cargo vessels (eleventh century CE), the sea became the basis of a pattern of connectivity in which the costs of interaction did not scale proportionally with distances or loads (Crumlin-Pedersen 2010; Englert 2015). In the latter half of the first millennium CE, this became the basis of a trajectory of cultural change, which anticipated important aspects of modern globalization.

Late Roman reflections

By the time of the great migrations, which accompanied the retreat of Roman control in western and central Europe in the fifth and sixth centuries, societies of northern Europe already had a long history of long-distance links with complex civilizations, as witnessed by the diffusion of Roman imports (Hansen 1987; Horsnæs 2010). People in its northern borderlands had adopted important technologies as a result of exchange with the Roman world: specialized production of standardized brands of textiles, pointing to production beyond the scale of domestic demand (Jørgensen 1992); rotary hand querns for grinding cereals, along with two-crop rotation schemes, characteristic of intensive cereal agriculture (Mikkelsen and Nørbach 2003); and bloomery furnace iron smelting organized on a massive scale, beyond regional consumption (Espelund 2013).

The effect of cross-cultural and inter-regional contacts was equally apparent in aspects of social organization, as manifested by increasingly hierarchical networks of power and structure, catalyzed by military confrontation (and co-evolution) with Roman armies and urban civilization. Roman armies stationed at the *limes* boundary in central Europe recruited soldiers from wide regions, almost certainly including parts of Scandinavia. Warrior groups and armies from beyond the Empire also made regular incursions into Roman lands. Some brought back military tactics and social technologies, as reflected in the large, uniformly equipped field armies, known from weapons sacrificed in Danish bogs (Ilkjær 2002). The construction of large, iron-riveted plank-built boats, known in Scandinavia since the fourth century AD, also developed from the tradition of Roman boats on the Rhine (Crumlin-Pedersen 2010).

Notwithstanding the importance of these innovations, the adoption of Roman technologies and ideas in non-Roman northern Europe was limited to contexts that would fit the pre-established order of Germanic society: intensified agricultural production, communal feasting and gift exchange, and military organization and technology. Other aspects of society, notably those rooted in urban forms of organization, were not transferred, for example the use of coins as a means of exchange and the specialized mass production of craft products such as pottery. In a similar way, products rooted in foreign aesthetics, e.g. the use of perfume (traced by glass bottles), floral and naturalistic designs, as well as symbolism associated with Classical mythology and, from the fourth century CE, Christianity, had a very limited cultural impact beyond the northern borders of the Roman Empire.

Contracting horizons

By 600 CE, societies around the northern European seas were in a vexed position. For centuries, they had developed in close proximity to the hegemonic power of the Roman Empire and consumed cultural influences, including military organization and technologies, as well as imported material culture from urban workshops near its borders. As a political and military force, that empire had now receded (since the early fifth century CE) to the coasts of the Mediterranean. Much of Europe, from the Mediterranean to the northern seas and central plains, had been shaken during the sixth century CE by social and demographic upheavals associated with military clashes and great migrations, a severe climatic event (the global "dust veil event" of 536 CE), and a pandemic: the Justinian Plague (see most recently Gräslund and Price 2012). Yet as a cultural and economic catalyst, the heritage of Rome was still manifest in the Merovingian kingdom of France, which maintained many aspects of its late Roman origins, including the far-flung cultural network of the Christian Church. Mediterranean powers were still in a position to make their presence – and attraction – felt.

Finds of amphorae imply that vessels from the eastern Mediterranean still reached maritime outposts in the Irish Sea region; occasionally such contacts led to lavish exchanges, as reflected in the cache of Byzantine silver found in the seventh-century CE Sutton Hoo boat burial in East Anglia (Harris 2003). In the Scandinavian countries, exchange with western Europe and the Mediterranean continued to develop, as witnessed by finds of drinking glasses from western European workshops (Hansen 1987) and, at least in the first half of the century, the arrival of Roman ivories and gold *solidi*, coinciding with the last blooming of the Mediterranean-wide Roman Empire (Ljungkvist 2010: 425–26).

At this point, northern Europe might have seemed poised for a phase of expanding networks, intensified communications, and growing economic complexity; yet the seventh century CE can hardly be portrayed as that. By 700 CE, the influence of the (eastern) Mediterranean, which had still been manifest in Britain and France a hundred years earlier, had become almost invisible. One conspicuous effect in the archaeological record is the almost complete disappearance of gold coinage, which had depended on imported metal (Blackburn 2007). Archaeometallurgical analyses of metal objects form this period point to a strongly increasing use of recycled scrap metal, with very little freshly imported material arriving to workshops (Jouttijärvi 2002). Likewise, the evidence of supra-regional contacts, which can be noted for previous centuries in Scandinavia and the Baltic Sea countries, decreases strongly (Hårdh 2003: 39; Ljungkvist 2009).

The effects on communications are strikingly illustrated in the finds from the long-lived regional centre Uppåkra in southern Sweden. Thousands of finds collected from metal detector surveys and from excavations over many years provide a cross-section of the contacts of this central place over time. In this perspective, the seventh century stands out as a low point for extra-regional contacts. Unlike other periods, there are very few indisputable imports; the ornaments found are mainly of local appearance (Hårdh 2003: 49).

The conspicuous decrease in foreign objects from the archaeological record points to a tendency of isolation, during which social networks were consolidated more closely to increasingly confined regions, as compared to the migration period. This isolation was by no means complete: occasional exotic objects continued to mark the existence of global flows of material culture. Among these, the early seventh century saw a notable arrival of amethyst beads and cowrie shells across Europe, from Italy to England and Sweden (Ljungkvist 2010). Both had ultimately travelled from a source in the Indian Ocean World; like ivories and gold had marked the impact of the sixth century Roman Empire, the arrival of these objects in northern Europe reflect the blooming of the Sassanid (Persian) Empire, where such things were widely circulated. However, they had almost certainly travelled by a long chain of intermediaries, mainly through western Europe and the Mediterranean.

To people in Scandinavia, objects such as ivories, cowries or amethyst beads were certainly status symbols reflecting international connections (Ljungkvist 2010: 436), but the cultural models and association they commanded, were more likely with their proxy origin in the prestigious Merovingian kingdom of France – whose fashions and customs were consistently emulated in the North during this period – than with their ultimate origin. While their presence implied material flows across remarkable distances, their arrival was only very indirectly conditioned by contemporary circumstances in the distant world, and their occurrence appears too sporadic to have conveyed any significant cultural or economic impetus from the point of their origin to their ultimate destination. It is useful here to distinguish between the scale of the cumulative flows marked by displaced objects and the scale of the dynamics responsible for their movement. While indisputably giving evidence to global flows, the exotic objects that arrived in northern Europe in the seventh century CE were hardly evidence of global dynamics (cf. Fontijn, this volume).

The Emporia network

A sign of the relatively weak economic integration of the north European until the late seventh century CE is the absence of urban centres as nodes of exchange. The Roman cities, which had formerly existed in England, the Netherlands and Germany, had largely ceased after the fifth century CE; to the north of the empire, no city culture had ever existed. The first distinctive pattern of urbanism to emerge in this part of the world was one based on networks of long-distance interaction: emporia (McCormick 2001; Hodges 2012).

Emporia developed as gathering and distribution centres for maritime trade. They were not the midpoints of districts or kingdoms, but rather the links in a network. They often lay in locations where onward travel became difficult or dangerous – where waters changed character, routes merged, large rivers met the sea, or where summer routes were exchanged for winter pathways. The preconditions that brought people together in these places did not lie in the countryside surrounding the towns, but in long voyages across the sea. Ships needed harbours with security for men and materials, as well as markets with enough goods to fill their cargo holds. It must be possible to acquire provisions, carry out repairs and stay for a number of months, if necessary. Some wares came from far inland after the sailing season had ended. Maritime towns were therefore busy all year round. They often lay at great distances from each other. If someone travelled for trade, it was vital that other traders visited the same ports. For seamen who had travelled for months at a time, it made little odds if the journey was a few days longer, if only a safe harbour and the best markets were the end result. By focusing inter-regional exchange in a limited number of places, emporia made the large world "small" (Sindbæk 2007a).

In contemporary written sources, emporia were firmly associated with Frisian merchant sailors from the coasts and islands in the Netherlands and northern Germany, who pioneered merchant sailing in the northern waters. The most notable emporia in eighth–ninth-century northern Europe included Quentovic in northern France, Dorestad and Domburg in the Netherlands, Hamwic (Southampton), London, Ipswich, and York in the British Isles; Ribe, Hedeby, Birka, and Kaupang in Scandinavia; Truso in eastern Poland and Staraya Ladoga in north-west Russia (Callmer 2007; Skre 2007). The emporia were integrated with networks of local fairs and markets, as well as seasonal gatherings, including *thing*-assemblies (Pestell and Ulmschneider 2003).

Emporia housed an unmistakably urban way of life. Here were market streets with exotic wares and skilled craftworkers, well versed in unusual techniques. Resident merchant communities with acquaintances in far-away towns provided brokerage and conducted exchange, sanctioned by local rulers and watched by their reeves (Sindbæk 2007b). Cemeteries reveal their populations as culturally mixed communities, and new practices were introduced (albeit not always widely adopted), including the earliest use of coins as a standardized means of exchange in Scandinavia and the earliest recorded Christian mission in the Baltic Sea countries (Näsman 2000).

The emporia sustained particular forms of craftsmanship. Viking Age Scandinavia is thus characterized by the introduction of highly standardized copper-alloy ornaments, antler combs, and glass beads – a characteristic combination of cheap, often imported, materials and highly competent craftsmanship, which could only have been achieved by craftspeople manufacturing a large number of combs as commodities for a market (Callmer 2002; Sindbæk 2007b). Their trade also affected rural networks. Finds attest to extensive production of wool textiles and to an increasing exploitation of outland resources, including iron extracted from bog ore, deer antler, or quarried products, such as steatite pots or hones (Holm *et al.* 2005; Ashby *et al.* 2015). This form of production demonstrates the impact of long-distance exchange networks on pervasive patterns of practice: people living in the Scandinavian Peninsula would go to outland areas to hunt reindeer, quarry stone objects, or produce raw iron, in order to ship the material to craft specialists at sites many days' sailing to the south. The rationale for this chain of activities sprang from the maritime network and the urban centres on which it focused.

Norðvegr, austervegr, vestervegr: the Viking expansion

Maritime networks were an essential condition of life in the North. The sea was not only an important reservoir of food or the road to neighbours and local meeting places, but also a link to basic resources that could not be adequately sourced from local environments. When vessels propelled by sails were adopted into this network society, it became a kick-off for one of the most prominent globalizing episodes in pre-modern history. Ships had sailed along most of Europe's coasts since the days of the Roman Empire. By comparison, sailing ships were a rather late development in Scandinavia. For thousands of years, small and large boats had been rowed between coasts, but from the late eighth century CE onwards, historical sources and archaeological finds suggest that something had occurred, which made the open seas navigable (Crumlin-Pedersen 2010: 95). Open-sea crossing may occasionally have been attempted – and accomplished – in open rowing vessels; however, it was only with the adoption of wind-powered vessels that it became possible to plan and manage regular journeys lasting for several days across open sea.

Seafaring across the open ocean was based on an inherent ability to navigate without landmarks, which required many years' experience at sea. This, in turn, was based on great investment of time and materials, whether it was specially selected trees for shipbuilding; high-quality iron for rivets, nails, anchors, or chains; or hand-woven sailcloth, tar or rope, which must be acquired in large quantities. The adoption of the sail at some point after 600 CE in Nordic societies did not represent the chance discovery of a new technology, but rather a conscious adoption and elaboration of existing models and practices – most probably learned from Frisian sailors in the southern North Sea region – in a situation where these investments made sense.

There is incidental evidence of contacts around the North Sea from various times since the Late Roman period. However, beginning from the late eighth century, western European chronicles describe naval raids by pagan strangers on monasteries along the northern coasts of the British Isles. They were soon followed by increasingly large and well-organized Scandinavian attacks and conquests in France and the British Isles (Barrett 2010). Before the end of the ninth century, Scandinavian diasporas had established overseas settler communities in the northern British Isles, in the Faroe Islands, and in Iceland. Further Scandinavian colonization took place in Greenland in the tenth century and – briefly around year 1000 – in Newfoundland (Jesch 2015: 22–23).

Mastery of the open sea opened northern sea-lanes to the rush of trade and exploration, piracy, and migration, referred to as the Viking Age. In the terms used by contemporary Scandinavian sailors, the axes of this new, maritime world were three principal sea-lanes: the *norðvegr*, the "North-way", which gave its name to Norway, and which was to prepare the route for ventures into the North Atlantic; the *vestervegr*, which led across the North Sea to Britain and Ireland and the west European continent; and the *austervegr*, the road to the east, across the Baltic and into the river systems of the eastern European continent.

Each of these "roads" was to have a notable impact on patterns of global interaction, articulating widely separate lands into economic and cultural flows. The "North-way" had a long history as the spinal cord of human habitation along the coast of Norway. With the rise of urban centres in the North Sea region, maritime trade percolated with remarkable speed along this route. We see a glimpse of the effects in the account of a late ninth-century Norwegian chieftain, Ohthere, who appeared as a guest at the court of King Alfred the Great in England (Bately 2007).

Ohthere told his host about the prized products of Arctic Scandinavia, including skins of marten, reindeer, bear and otter, birds' feathers, walrus tusks, and ship's ropes made of walrus-hide or sealskin. He also describes his sea voyages from the Arctic Ocean to the emporium Hedeby in Denmark, where he would have been able to access desirable products for urban trade. Archaeology demonstrates the reality of Ohthere's account of rich Viking-Age farmers with far-flung connections in Arctic Norway. A chieftain's farm, with an 80 m long main house excavated at Borg on Vestvågøy, in the Lofoten islands, is one of the grandest buildings known from Viking-Age Scandinavia. Finds from the site include amber beads from the Baltic region, jewellery of gold and jet from the British Isles, and sherds of Frankish wine pitchers and glass beakers (Munch *et al.* 2003). Such finds, and the testimony of Ohthere's account, demonstrate how people on the Arctic margin of Europe could act as entrepreneurs in a globalizing process.

Connections along the "Eastern-way", into and across the east European rivers, are attested by Byzantine and Islamic sources from the ninth and tenth centuries, where warrior merchants from the northern seas are described as trading in furs and slaves (Duczko 2004). Already by the late eighth century CE, however, locally produced glass beads in Scandinavian emporia had to compete with beads that were mass-produced in west Asian glassworks (Callmer 1995). Archaeologically, the eastern contacts were articulated most prominently by the tens of thousands of Islamic silver coins (*dirhams*), which have been found in hoards or as single finds in northern Europe (Kovalev and Kaelin 2007). The quantity and chronology of their arrival in the north reflected the vast output of mints in the Abbasid caliphate in the eighth–ninth century Middle East, as well as the subsequent wave of silver minting of the Samanid rulers of central Asia in the late ninth and tenth century. Islamic sources imply that the silver was matched by counter-flows of slaves and furs from the north.

The arrival of eastern silver had a profound effect on the practice of trade in the northern lands. Previously, silver had occurred only sparsely and only held a minor role in exchange. Now it became the basis for the first widespread system of quasi-monetary exchange in the countries surrounding the Baltic Sea. Exchanged by weight as perfectly divisible "hack-silver" (i.e. fragmented coins and jewellery) and used together with scales and weights based on units consistent with Islamic weight systems, it acted as the international measure of value in trade from the mid-ninth century CE and well past 1000 CE, when a system of exchange based on coins with a nominal value was gradually introduced from western Europe (Steuer 2009).

The "Western-way" over sea equally held attraction as being a way to acquire portable wealth, through either trade or plunder, but it also came to be a path to more far-reaching forms of cross-cultural interaction. Northern seafarers who arrived over sea to Britain, Ireland, and the west European mainland discovered that their newly developed mobility enabled them not only to bring home goods, but also to influence domestic power struggles in foreign lands to their advantage. By the early tenth century CE, "Viking" armies and their leaders were dominant political players in Normandy, northern England, and Atlantic Scotland and controlled trade in Ireland from the island's first urban centres, including Dublin.

All of these regions also saw substantial immigrations of Scandinavians who settled as diaspora communities. They maintained bonds and aspects of cultural identity associated with their homelands, including the use of Scandinavian languages, names, and dress ornaments (Kershaw 2013; Jesch 2015). Yet they also assimilated with aspects of local culture, most conspicuously by accepting Christianity at a time when people in Scandinavia were still generally pagan. The cross-cultural process in the diasporas contributed to catalyze profound changes in Scandinavia as well, including Christianization. By the early eleventh century, the North Sea world was integrated to such an extent that a Danish king, Cnut, was able to gain the acceptance of English and Scandinavian nobility alike. Between 1014 and 1035 CE, he acquired the thrones of England, Norway, Denmark, and part of Sweden and maintained a peaceful empire across the North Sea. Cnut's empire had a well-attested impact on both sides of the North Sea, giving rise to a hybrid elite culture using Scandinavian ornamental styles and English dress-fashions (Pedersen 2004).

The eventual causes for the Viking-Age maritime expansion are widely debated (Barrett 2010; Ashby 2015). The wealth of goods and materials acquired through long-distance voyages makes it clear that Scandinavians considered such objects to be important. Durable, movable forms of wealth held particular attraction as an aspect of social relations, through their capacity to "store" wealth, and to settle disputes (Sindbæk 2011). The prospects of opportunities for acquiring large amounts of portable wealth would present a major incentive for the development of nautical skills, knowledge and technology. Sometimes the details of such prospects may have been imagined, as much as perceived and calculated. It is by no means certain that early North Sea crossings, and the associated raids on monasteries, ever produced the expected returns – indeed the first wave of raids appears to have receded after a few years; but by raising a prospect of more to be found, it sustained a social process, which made communication with remote regions a priority.

The growth in seafaring, trade, piracy and exploration that gained momentum during the eighth century CE was not limited to Europe's northern seas. It is striking to note that the centuries that saw the establishment of coastal trading towns along the Baltic and the North Seas equally witnessed the spread of emporia along the eastern coast of Africa (Wynne-Jones 2014). Similarly, the decades in which sailing vessels were first employed to cross open waters from the seaboard of the North Atlantic coincide with the first recorded direct sea voyages between the Persian Gulf and China, as spectacularly illustrated by the wreck of an Arab dhow found loaded with Chinese cargo off the Indonesian island, Belitung (Vosmer 2014).

The common point, which unites East African emporia, Indian Ocean cargo ships and Viking trading expeditions at this this point in history was economic power and trade-goods, including vast quantities of silver, which issued from the Abbasid Islamic caliphate in the Middle East. The rise of maritime trade and urbanism, which can be followed in northern Europe in the eighth and ninth centuries CE, is unlikely to have gained the momentum that it did had it not been for this factor. The desires for prestigious, non-local commodities had existed for centuries; and technologies for maritime were adapted to a purpose, not revolutionized by new innovations. What caused the Viking Age in the North Atlantic and Baltic Seas was, literally, global economic incentives.

The connectivity of the first Atlantic economy

The extent to which the maritime expansion of the late first millennium enmeshed the northern lands of Europe into a much wider world, integrated by cultural and economic flows, is brought out by an account written around 1070 in the archdiocese of Bremen by the cleric Adam (*Gesta* book four; Tschan 2002). Adam was well informed by church records and informants, and he had occasion to interview voyagers, missionaries and maritime entrepreneurs, such as the Danish King Svein. Exactly by using the increasing connectivity of the age, Adam was able to assemble a comprehensive description of the countries around the Baltic Sea in a way that no one could have done three centuries before and to comment in detail on the political affiliations, trade goods, sailing routes, urban centres – and pirates' nests – of this world.

Adam describes the Baltic as a sea-lane reaching as far as the "Greeks" (i.e. Greek Orthodox Russians) (*Gesta* 4.10; Tschan 2002). To the west, he was familiar with the inhabitants of the Orkney Islands, the Faroese, Iceland, Greenland and even "Vínland", i.e. Newfoundland ("yet another island of the many found in that ocean", cf. *Gesta* 4.38; Tschan 2002). The focal points of Adam's world were cities, such as Sigtuna, Novgorod and Schleswig, where merchants and sailors convened, where knowledge and power were gathered, and where cultural innovations, such as Christianity, were promoted (Carelli 2001).

As archaeology attests, the Northern cities thrived from long-distance exchange, involving large, purpose-built cargo ships. The time around 1000 CE marks the first appearance in Northern European waters of a new class of specialized, capacious vessels, which could not be rowed but depended entirely on a sail for propulsion. Their construction was achieved through a series of technological innovations, including, before 1100 CE, a prominent change in hull shape to accommodate a stern rudder in place of the traditional side ('star-board') rudder, which could not be effectively scaled to match the growing size of vessels (Englert 2015).

The development and proliferation of specialized cargo ships marks, on one hand, a steeply rising demand for an economic means of bulk cargo transport, doing away with the need for dozens of rowers; on the other hand, these relatively slow ships, which would have carried valuable cargoes, express a confidence in a powerful authority to keep peace at sea and in the harbours. Unlike the sailing ships of the preceding centuries, they were unable to be properly handled at an open beach landing and called for elaborate facilities for berthing, loading, provision, repair and storage at harbours – a situation which is confirmed by the increasingly elaborate harbour structures found at the key trading towns of the period (Hilberg and Kalmring 2014).

The impact of the flows, which convened in cities, also affected the culture and economy of people in rural settings at a great distance from urban centres, such as in the North Atlantic fisheries, whence quantity of dried cod was shipped off to southern Scandinavia and to the British Isles (Barrett *et al.* 2011); in quarries in western Norway, where quern stones and bake stones were prepared for export (Baug 2015); and even in far distant settlements in Arctic Iceland and Greenland, where hunting expeditions targeted walrus for tusk ivory and other game for fur and feathers as luxuries that would enable the settlers to acquire iron and manufactured products from urban centres such as Dublin, York, Trondheim and Bergen, where products, including fragments of walrus tusk, have been found (Keller 2010; Frei *et al.* 2015). Regular material exchange across several thousand kilometres marks out the global flows of a budding Atlantic economy.

The economic integration of vast regions achieved by means of maritime connectivity was accompanied by at least two major cultural transformations: a flow of Christian religion, monetization and written Latin from the south into Scandinavia and the Baltic Sea countries; and a substantial influx of vernacular Scandinavian language, culture, styles, and people into the Atlantic islands, the British Isles (Kershaw 2013) and arguably parts of Eastern Europe (Duczko 2004). In a few places, such as Iceland or Greenland, these currents moved into virgin territory; elsewhere they led to tensions, conflicts, negotiations and eventually settlements, such as the resistance to Christianization mentioned by Adam's account, or the violent confrontations by English and Irish chronicles, and testified by archaeology, for Orkney (Barrett 2004). The events – political, military and cultural – associated with these processes are benchmarks in the history of northern Europe in this age. In this sense, the globalizing process of maritime connectivity is not an occasional side current in the evolution of early medieval societies around the Baltic and the North Atlantic, but a *leitmotif* in the conjuncture of history in this age.

Conclusion

If the reality of globalization, as a form of connectivity that envelops the world, is an achievement that is restricted to the last four hundred years of human history (or less, cf. Robertson, this volume), the more general trend underlying this process is a tendency that occurred prominently among societies inhabiting the lands around the North Atlantic and the Baltic in several episodes during the first millennium CE: the propensity of some human societies, at particular junctures in history, to see outstanding opportunities at, or beyond, the horizons of their known world, and invest extraordinary amounts of energy, resources and social competition in seizing these opportunities.

Aspects of these developments, including the Viking trade, monetization and expansion into the North Atlantic, as well as the urbanization of commerce in the Baltic Sea, have been harnessed as components in Western historical narratives underpinning claims to exceptional cultural and institutional roots for Europe's subsequent economic development in the modern period (critique in Blaut 1993). However, these developments were not exceptional to northern

Europe; the goods and practices of Viking trade were enmeshed with Islamic trade networks, which also reached central Asia and East Africa. Ships that plied the Mediterranean and the Indian Ocean in this period were of comparatively larger size and capacity than those which sailed between the harbour cities on the Baltic and the North Sea; and the growing specialization of northern cargo vessels after 1000 CE, as reflected by the adoption of the stern rudder, for example, was anticipated by Mediterranean and Indian Ocean shipbuilders in the late first millennium CE (Trakadas 2014; Vosmer 2014: 61). In a long-term historical perspective, the temporal coincidence of these developments is as striking as their variation. They were conditioned by global flows of technology and economic incentives that were "not so much 'of the west' as it was of and in the world economy" (Frank 1998).

The incentives for these episodes were lodged in "world" (if not global) currents, guided by the fortune of "core" imperial fortunes and policies, and the prominent flows of objects and materials, which mark these events in the archaeological record, coincide with the zeniths of imperial power: sixth century CE Byzantine–Sassanid extraversion (gold *solidi*, cowries, ivories, garnets and amethysts); and the ninth–tenth-century CE Islamic world economy of the Abbasid and Samanid empires (silver dirhems, carnelian, and rock crystal beads, as well as mass-produced glass vessels and beads).

However, the agency, which was responsible for facilitating these flows, and thus for transforming availability into socially and culturally significant opportunities worlds apart from their source, appears to have emerged as much from the periphery as from the political centres. Byzantine and Islamic writers in the first millennium CE had only vague knowledge of the geographical origin of the northern European merchants who extended the impact of their worlds to the edge of the Western Ocean. In so far as this expansion can be regarded as a process pointing towards globalization, one of the things which makes it so is the fact that it was not organized as the extended action of empires and states, but as a heterogeneous pattern of practices, rooted in widely dispersed regions and actors.

Another corollary of modern globalization, which appears to be a characteristic also of its precursors in northern Europe, is the fact that the process of supra-local connectivity did not unfold as a progressive, linear pattern; rather, it seems to have followed spectacular punctuations and dynamics. The chronology of flows of objects marks long-distance exchange cycles, which were established within a remarkably short time, and which were separated by long periods, where no comparable connectivity was seen. While we cannot follow the process in detail, the pattern of steep growth and decline, which marks the occurrence of exotic objects, makes it plausible that inflated expectations, diminishing returns and bubble bursts were features of pre-modern interconnectivity, as they have been a feature of economic globalization from the seventeenth-century Dutch tulip mania to the present.

This last observation serves as a reminder that the desire to vest interest and resources in long-range connectivity, underlying the various forms of globalization processes, is driven by prospects of unknown, emerging, or indeed purely imagined opportunities, as much as by perceived, calculated gains. As such, actions and energies invested towards this end are easily disappointed. This may be the reason why, when regarded in historical depth, globalization appears to be anticipated by numerous, remarkably active episodes of far-reaching connectivity and also why these episodes, like the early Islamic Rus' trade or the Norse expedition into the North Atlantic, do not add up to a consistent, linear tendency towards modern world global interdependence, but rather to a notably punctuated pattern of highly active booms, separated by periods of relative disinterest in the global.

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6.6

Globalization and *china*

Materiality and *civilité* in post-medieval Europe

Martin Pitts

Introduction

From a world historical perspective, Chinese porcelain is a quintessential globalizing commodity. For evidence of its success, one only has to consider the extent to which the word *china* has become naturalized in contemporary global culture to stand for a plethora of cups and plates used in communal dining. From a European perspective, a key period in the proliferation of porcelain was the eighteenth century. At this time, porcelain factories were established across the continent, notable examples including Meissen (Germany, 1709), Vienna (Austria, 1718), Rörstrand (Sweden, 1726), Vincennes and Sèvres (1740 and 1756, both France), Capo di Monte (Italy, 1743), Bow and Chelsea (1740s, England), Wedgwood (1759, England), Weesp (1759, Netherlands), and Copenhagen (1770s). While this phenomenon may be seen in the immediate context of the Industrial Revolution, the production of porcelain differed from many other industries in one key respect. Unlike many of the new products favoured in Europe at the time, mass-produced porcelain was a *Chinese* invention. Chinese porcelain had circulated in Europe for centuries before Europeans managed to successfully produce it for themselves, and even during the height of its production in the eighteenth century it is estimated that Chinese vessels in Europe still outnumbered the combined outputs of all the European factories (Godden 1979: 15).

It is clear that the European attraction of Chinese porcelain lay in its aesthetic material qualities – elegant vessels with thin, translucent walls, typically set with underglaze blue decoration, which by comparison of feel, weight and texture made contemporary European wares seem crude and cumbersome. While the debt to Chinese design in influencing European porcelain manufacture is widely acknowledged, the impetus for the phenomenon is more routinely cast as something European, specifically in relation to the rise of capitalism and the middle classes. Sombart (1967), for example, explained the need for porcelain arising through a series of related factors: a new culture of table luxury in the home, the elevated socio-economic role of women and the exponential growth in demand for sugar, cocoa, coffee and tea. Similarly, through the phenomenon of *chinoiserie*, the complexity of Chinese visual culture was simplified for European consumers, simultaneously casting China as the Other in the European cultural imagination (Berg 2005: 49–52). In other words, most explanations consider Chinese porcelain and visual culture to have been appropriated by Europeans for their own ends, denying other forms of agency in the process.

This chapter examines the materiality of historical globalizing processes by exploring the example of circulating Chinese porcelain, its appropriation in Europe, and interaction with European consumer contexts, focusing on the Netherlands and Dutch East India Company in the seventeenth and eighteenth centuries. In particular, it problematizes the contribution of Chinese porcelain to what has been famously termed the 'civilizing process' in post-medieval Europe (Elias [1939] 2000; Mennell 1996), which is widely seen as an early template for elements of contemporary global culture and shared practices. I define materiality in broad terms of the material qualities (e.g. shape, colour, fabric and feel), which may exert an influence on the social use of circulating artefacts. I take as a point of departure the recent research in art history and cognate disciplines that stresses the role of *china* (ware) as a globalizing commodity, as seen through the long lens of history (e.g. Brook 2008; Finlay 2010; Rujivacharakul 2011; Versluys 2015). These works ably demonstrate how, from its origins in the seventh century CE to the development of export wares in the fourteenth century, and its continued manufacture in the twenty-first century, Chinese porcelain has been continually (re)appropriated around the world, greatly influencing a range of cultures ranging from potting traditions and interior décor to the etiquette of the table and aristocratic collecting. My intention is not to précis such research, but rather to explore the phenomenon of *china* in Europe from an archaeological perspective, drawing upon larger datasets of material culture to establish wider patterns. In doing so, I argue that in terms of *materiality*:

1. Early modern Europeans were only the latest of a long line of successive globalizing cultures to appropriate *china* in the construction of their self-image.
2. Core elements of the European civilizing process (notably the development of table manners) were intimately influenced and shaped by *china* as materiality.
3. Early modern globalization, as facilitated by early corporations such as the Dutch East India Company, helped promote imagined and shared (but simultaneously heterogeneous) global cultures centred on the collection and use of *china*.

On *china*, globalization and materiality

Studying globalization presents a range of challenges for archaeologists. One of these is the issue of multiple scales, as discussed by Knappett and Feinman (this volume) – the need to not simply contextualize local developments with examples from a wider spatial framework, but to crucially explore the *connections* between micro-contexts and macro phenomena through different forms of circulation – of ideas, people and things. In this regard, Foster's (2006) summary of approaches to tracking globalization is particularly relevant for archaeologists in stressing the need to visualize networks, connections and objects in motion. While it is established archaeological practice to study meaning through close attention to context (Hodder 1991), understanding globalization requires that equal attention be paid to object biography (e.g. Appadurai 1986; Thomas 1991) and circulation. Following Rujivacharakul (2011), and amplified by Versluys (2015), such a perspective requires us to make careful distinctions between *china* as materiality (as circulating objects with a degree of agency), *China* as cultural connotation (perceptions and ideas of China and 'Chinese-ness'), and China as place (as centre of production for *china*). Put simply, while the mass export of *china* to new lands may imply some level of material homogenization, this material process may be entirely disconnected from any notions of *China* in the cultural imagination of its recipients. Using a *china* plate neither evoked a consistent image of *China* or China (if these were evoked at all), and nor did it entail 'becoming Chinese'.

Nevertheless, as is explored below, archaeological and historical research has the potential to uncover something more of the role of *china* in Europe, both in terms of its materiality, and the cultural imagination of its recipients.

Further exploration of the relationship between objects and their varied cultural connotations requires consideration of their practical uses as well as their biographies – the actualities of what objects *do*. Recent work on materiality in archaeology and related disciplines radicalizes this line of thought, placing emphasis on the agency of objects, and exploring not only the dependency of humans on things, but also dependencies of things on things and things on humans (e.g. Hodder 2012). Understanding the local configurations of such entangled dependences of objects is vital to conceptualize globalization in terms of materiality. For example, regarding the role of *china* in eighteenth-century Europe, even at a crude level, the social activity of tea drinking depended on the availability of particular vessel forms, such as a spouted and handled pot to pour the tea, and cups and saucers for its consumption. To function effectively, the cups are dependent on an equal number of uniformly sized and decorated saucers to accompany them (as is discussed below), as the spouted pot is dependent upon having a lid to prevent spillage while pouring. Similarly, the whole service depends upon a human with the appropriate cultural knowledge concerning the 'correct' usage of the various vessels. Of course, a wholly different configuration of dependencies is likely to have applied to identical vessels finding their way into different cultural contexts, such as seventeenth-century Japan (as is also explored below). This particularization of a universal commodity (*china*) to suit local cultures constitutes the very essence of globalization in cultural terms. This phenomenon works simultaneously with the more familiar globalizing trope of the 'universalization of the particular', in which an impression of homogenization is created through the ubiquitous presence of standardized items that appear far from their particular place of manufacture. In view of this, in the rest of the chapter I aim to contextualize and explore the materiality of *china* in post-medieval Europe, and in particular the role of *china* in the creation of a new set of human–thing dependencies as part of the European 'civilizing process' (Elias 1939).

A decade in global trade: *china* and the Dutch East India Company, 1640–49

To effectively conceive of globalization as a material process, researchers must be able to shift their scales and frames of analysis from global to local, in-between, vice-versa and back again (cf. Knappett and Feinman, this volume). With this in mind, I aim to take as wide-angled a starting view as possible regarding the circulation of *china* that reached post-medieval Europe. To this end, records kept of the orders and shipments of Chinese porcelain by the Dutch East India Company (Vereenigde Oost-Indische Compagnie, hereafter VOC), not only permit insights into the changing volume and shapes of vessels shipped by the VOC to the Netherlands and various Dutch trading outposts, they also detail (in particular years, albeit inconsistently in the seventeenth century) the orders and shipments sent to various non-Dutch localities, ranging from Basra to Nagasaki (for the seventeenth century: Volker 1954; for the eighteenth century: Jörg 1982). Figure 6.6.1 provides a quantitative snapshot of several world *china*-consuming cultures in the 1640s, at least as facilitated by the VOC as shippers, displaying the eight most numerous vessel forms shipped in the period, with the addition of any other shapes that were shipped to particular localities in quantity (e.g. tea pots for Nagasaki). The 1640s constitute a high point for VOC *china* imports to the Netherlands, coming four decades after the Dutch wrested the *china* trade monopoly from the Portuguese, and roughly coinciding with the peak of so-called Kraak (carrack) porcelain production at the end of China's Ming dynasty (Rinaldi 1989: 62).

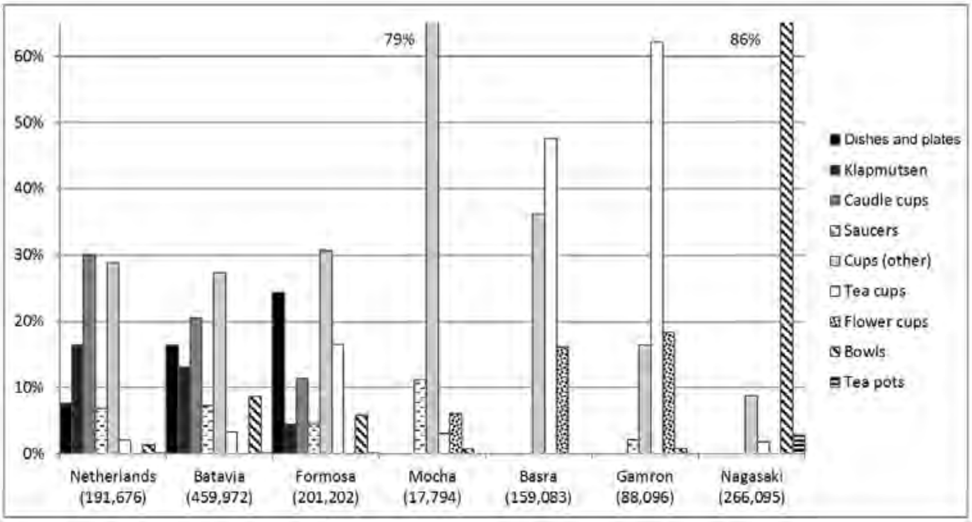

Figure 6.6.1 Details of Chinese porcelain vessels shipped by the VOC *c.*1640–1649 CE (total vessel quantities per location given in brackets). Data from Volker 1954

Delving into the detail of Figure 6.6.1 reveals some striking similarities and differences. The first pattern to note is the rough consistency in the forms of *china* vessels shipped to the Netherlands and the Dutch trading posts at Batavia (Jakarta, Indonesia) and Formosa (Taiwan). This was surely underpinned by shared European practices, requiring the customary dishes and plates, as well as vessels exported by the Chinese to cater for specific European tastes such as the klapmuts (a hat-shaped bowl with an everted rim) and the caudle cup (or kandeelskop – for further statistical consideration of these peculiar vessels, see Pitts 2015). The klapmuts is strongly associated with the consumption of Dutch soup, with the rim better accommodating a resting European spoon than regular steep-sided *china* bowls (Rinaldi 1989: 118–19; Brook 2008: 75–77). Similarly, the kandeelskop or crowcup has been linked to the European beverage of caudle (Volker 1954: 22–23), a sweet, viscous combination of eggs, milk, wine, sugar and cinnamon (van der Pijl-Ketel 1982: 119), although other specifically local uses (i.e. for alcoholic spirits) are more likely (Rinaldi 1989: 154). Indeed, recent research has questioned Volker's original identification of these vessels with caudle – instead, the original term used was 'cameelscoppen' or 'camel cups', referring to everted rim cups in various sizes not directly linked to a particular beverage (Vialle 2014). Whatever the cups were used for, it is unlikely to have been tea drinking. While the mass importation of tea had begun in 1637 (Volker 1954: 48–49), few designated tea cups or coffee cups were being shipped to the Netherlands, in sharp contrast to the much larger quantities off-loaded by the VOC in Safavid Persia (spanning the territory of modern Iran and its neighbours, including Basra, modern Iraq) and Zaidi Mocha (modern Yemen, and the major global coffee producer at the time).

While the similarity of porcelain requirements in the Netherlands and its trading posts at Batavia and Formosa is not so surprising, the stark contrast with the shapes of *china* shipped to Mocha, Basra, Gamron (Bandar Abbas) and Nagasaki requires further reflection. If the VOC was an instrument of material globalization, clearly the outcome was not one of homogenization, beyond spreading *china* at the most basic level. Not only were the vessel forms purchased in these non-European locations in very different ratios to the equivalent shapes favoured by

Europeans, there were also significant quantities of vessels not favoured by Europeans at all. This involved the generic steep-sided *china* bowls favoured at Nagasaki (accompanied by several hundred tea cups and tea pots), which coincides with an equivalent consumer revolution in the mass-uptake of *china* in Japan (Rousmaniere 2012: 145), a Persian predilection for Chinese tea cups and so-called 'flower cups' (in general, Basra and Gamron: fig. 6.6.1), and a lack of interest in Dutch-favoured klapmutsen or 'caudle cups'. These patterns are important because they undermine the commonly held notion of globalization as homogenization and convergence upon a single dominant cultural model. If this false assumption held, one would expect the Dutch to encourage the adoption of combinations of vessels suited to European practice – or at least only ship vessels of interest to Europeans in the first place – neither of which actually happened. Instead, what Figure 6.6.1 appears to show is a clear example of the particularization of the universal, whereby local cultures appropriated *china* to their own ends. For the Dutch, this seems to have entailed a variety of vessels needed to fulfil new European ideas of civilized dining, whereas tea and coffee drinking were of prime importance for communities around the Persian Gulf and Yemen, with the Japanese tea ceremony requiring rather different shapes again in Nagasaki. Crucially, in terms of materiality, these divergences were underpinned by a range of different material dependencies, including the growing need for complete dining services in Europe, as explored in the next section.

Universalizing the particular: the long-term agency of *china* in Europe, 1600–1800

As demonstrated in Figure 6.6.1, the vast majority of Chinese porcelain exported to Europe in the seventeenth century was in the form of vessels (at least designed) for communal eating or drinking. On this sphere of social practice, Georg Simmel's short essay on the 'Sociology of the meal' (1910) is especially informative (Frisby and Featherstone 1997: 130–35), linking the rise of aesthetic principles in table manners and the design of objects to the changing materiality of the meal and its accoutrements. Simmel argued that the lower classes did not develop regulated table manners because their meals were mainly for basic nutrition, whereas higher social groups dined together for socialization rather than to simply gratify bodily needs. Such socializing focused on the meal demanded a code of rules, often with material consequences – the need to eat with an elegant utensil as opposed to one's fingers, and the need to operate the utensil according to the correct protocol. Standardized eating utensils mitigated the direct association of the individual with food as matter, turning an ugly biological process (in Simmel's view) into something more aesthetically pleasing and refined for polite company. Accompanying this shift in the aesthetics of the meal is a shift away from communal consumption from a shared vessel to the rise of the plate as a means for individual dining in a communal setting. Simmel believed the plate to symbolize the civilized order by which the individual participated in the group, while simultaneously setting limits on individualism.

Simmel's thoughts on the meal resonate closely with those of Norbert Elias on the civilizing process exemplified in the shift in post-medieval European table manners (Elias [1939] 2000; Mennell 1996). Through the analysis of contemporary literature, Elias demonstrated a change in European material practices, from the fifteenth century when table utensils were sparse and eating from communal dishes was commonplace, to the seventeenth century when utensils and plates started to become more widely available – a period that also happens to coincide with the mass availability of *china* in Europe. Shifting our analytical scales from the global to the local – in this case the corpus of ceramic data assembled by Michiel Bartels (1999) from excavations in a series of Dutch towns – it is possible to explore the materiality of this so-called civilizing

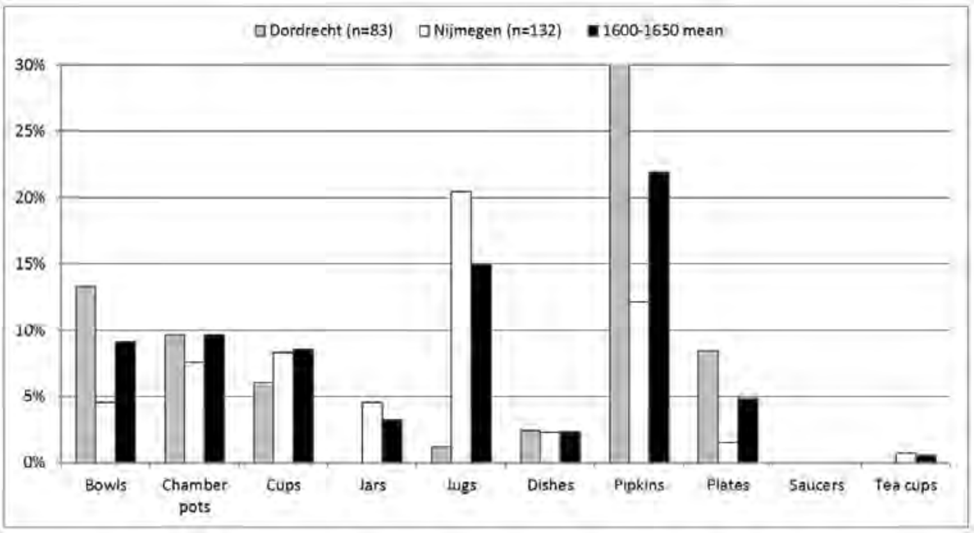

Figure 6.6.2 Ceramic assemblages from Dutch urban locations, *c.*1600–1650 CE. Data from Bartels 1999

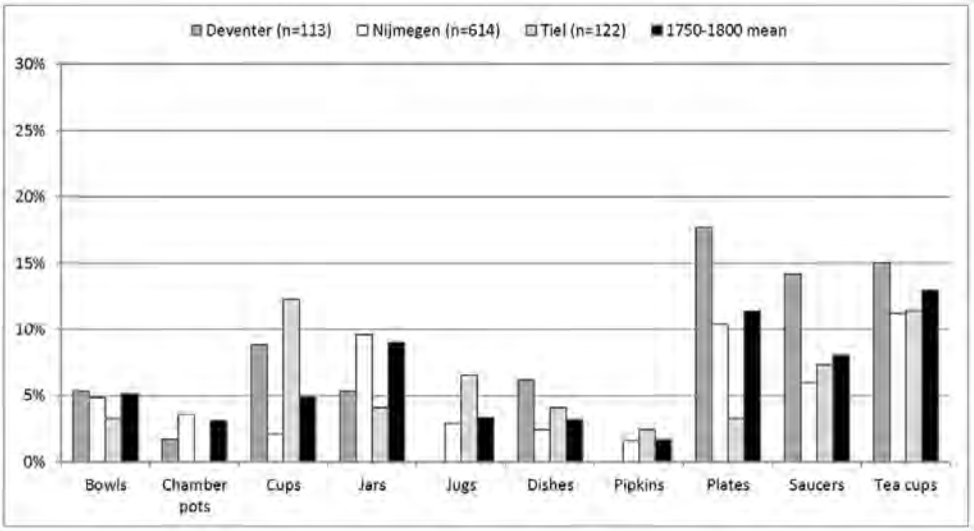

Figure 6.6.3 Ceramic assemblages from Dutch urban locations, *c.*1750–1800 CE. Data from Bartels 1999

process, comparing the beginning of the seventeenth century (*c.*1600–1650) when *china* first made its appearance (Figure 6.6.2) with the end of the eighteenth century (*c.*1750–1800) shortly before the cessation of mass *china* exports to the Netherlands (Figure 6.6.3). As with Figure 6.6.1, Figures 6.6.2 and 6.6.3 display data relating to the (ten) most common vessel types across the seventeenth and eighteenth centuries, although here the data consist of all wares – local, regional, and imported (including *china*).

Figure 6.6.2 details the proportions of different vessel forms from Dordrecht and Nijmegen at the start of the seventeenth century, taking all assemblages from the corpus of Bartels (1999) with a median date falling into the first fifty years of the century (*c.*1600–1650). The figure does not distinguish between different wares (only one *china* vessel was reported amongst a minimum of 215 total vessels), but nevertheless permits an insight into the prevailing combinations of vessel forms preferred at the time. With the previous discussion of Dutch tastes in *china* in mind, few of the *china* vessel shapes favoured for import in the mid-seventeenth century can be recognized in quantity in Figure 6.6.2. The most popular vessel shapes are in fact coarse ware jugs and pipkins (pots with tripods and spouts for cooking over a fire), which in comparison to the dainty *china* plates and cups were crude and cumbersome. Of course, from a methodological point of view this finding is not entirely surprising. Archaeological ceramic assemblages are usually composed of large quantities of the most basic and cheap cooking wares, whereas more expensive fine wares like porcelain would be produced in smaller quantities, looked after more carefully, and therefore take longer to be broken and enter the archaeological record. This is clearly the case with *china* in the Netherlands, where Ostkamp (2014) notes extensive evidence of repaired seventeenth-century porcelain in contexts from the eighteenth and nineteenth centuries. Even with such considerations in mind, however, Dutch urban ceramic consumption at the start of the seventeenth century evidenced in Figure 6.6.2 does not look to have been profoundly affected by any civilizing process – dishes, plates, tea cups and saucers either feature in very small quantities or are absent altogether, whereas coarser jugs, pipkins and chamber pots feature in much higher quantities.

In contrast to the seemingly mundane repertoire of coarse pottery forms noted from early seventeenth-century assemblages (Figure 6.6.2), assemblages from the last 50 years of the eighteenth century (*c.*1750–1800; Figure 6.6.3, this time concerning the towns of Nijmegen, Deventer and Tiel) show a virtually upside-down picture. The previously favoured coarse jugs, pipkins and chamber pots now collectively form the *scarcest* vessel categories, whereas plates, tea cups and saucers are the most numerous. These findings, which this time feature a much higher proportion of *china* vessels, seemingly attest the observations of Simmel and Elias on Europe's civilizing process, which had evidently permeated most urban households by this time.

Although perfectly logical, the idea of *china* fitting into a primarily European cultural process may be only one side of the story. It is perhaps noteworthy that the types of vessels preferred in Figure 6.6.3 (predominantly European produced plates, tea cups and saucers) correlate very well with the equivalent forms of *china* that circulated in the mid-seventeenth century (1640–49; Figure 6.6.1), even if not all of these were favoured by the Dutch at the time. If objects could speak, perhaps they would say more of this potential genealogical link. Rather than credit the impetus for this change purely to the European discourse on *civilité* at the time (following Elias [1939] 2000), a more radical reading in terms of materiality might stress the (long-term) agency of *china* in forming an enduring template for (re)appropriation by European potters from the seventeenth century to the present day. Not only did this agency exert itself upon other objects, but also people. While the very first *china* exports to Europe were often frozen as aristocratic display pieces (the ceiling of the De Santos palace in Lisbon forming a notable example, e.g. Carswell 2000: 129–30), mass ownership and availability arguably *encouraged* Europeans to find uses for porcelain that previously did not exist, notably the polite consumption of new beverages such as coffee and tea (the subject of the next section). Thus was *china* truly globalized and globalizing.

Particularizing the universal: the European transformation of *china,* 1600–1800

From the start of the seventeenth century, it is clear that Chinese porcelain was highly valued in the Netherlands, being available for the first time to the mass market following the capture of the cargo of the Portuguese carrack, the *San Jago*, which was publicly auctioned in Amsterdam in 1602 (Volker 1954: 22). As discussed above, the first *china* vessels widely available outside the aristocratic sphere in the Netherlands were evidently circulating in contexts that had yet to be thoroughly affected by any civilizing process – at least based on comparisons between domestic ceramic assemblages from the early seventeenth and late eighteenth centuries (Figures 6.6.2 and 6.6.3). To explore this process in more detail, an obvious and evocative avenue for research is to examine the uptake of new manners and material practices that *required* dedicated material culture – notably the services of pots, cups and saucers needed for the spreading habits of tea, coffee and chocolate drinking. Not only did these vessels differ from the typically coarser drinking vessels previously produced in Europe, but the idea of designated vessels for tea or coffee consumption was to become firmly ingrained into VOC record-keeping, permitting direct quantitative analysis of the changing demand for both commodities and *china* vessels required for their consumption.

Figure 6.6.4 shows the changing relative proportions of individual *china* drinking vessels (including saucers) imported by the VOC in the seventeenth and eighteenth centuries. The most notable pattern here is the inconsistency in supply in the early seventeenth century compared with the consistency of the eighteenth century. The early variability no doubt reflects a combination of '*china* mania' in the Dutch cultural imagination (in which most designs and shapes would find a buyer, largely irrespective of practical use), with the irregularity of supplies then obtained by middlemen from Chinese producers. Nevertheless, the most

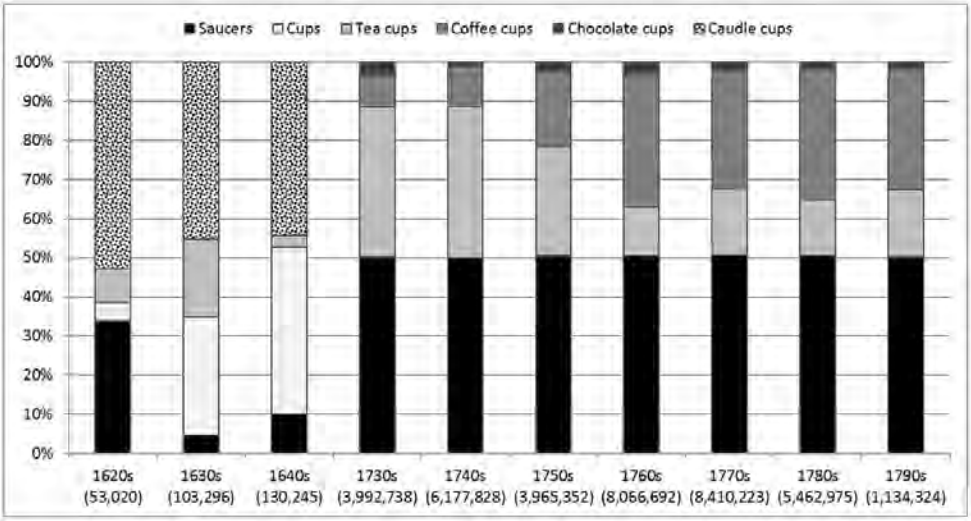

Figure 6.6.4 The relative proportion of Chinese porcelain drinking vessels imported to the Netherlands by the VOC (total vessel quantities per decade given in brackets). Data from Volker 1954 and Jörg 1982

dominant drinking vessels imported in these first decades were so-called 'caudle cups' (probably cameelscoppen, see previous discussion). Unfortunately data are lacking for the last decades of the seventeenth century, when the VOC *china* supply declined to a trickle as a result of regime change in China, which was accompanied by the loss of several VOC Pacific outposts. By the time the *china* trade resumed, this time via direct trade from Canton in 1729, the 'caudle/cameeel cup' had virtually gone out of fashion, as with the more reliably locally appropriated klapmuts. Whatever cameel cups were used for, they were replaced by a preference for newly labelled and shaped vessels geared towards tea, coffee or chocolate consumption, reinforcing the suggestion that the earliest mass consumption of *china* was geared towards rather different, local, pre-existing practices (Pitts 2013, 2015).

A standard explanation for the decline of vessels used for pre-existing local practices and the rise of those for tea and coffee would invoke the civilizing process – tea and coffee being much more suitable to help the emerging middle classes distinguish themselves from the habits associated their rustic medieval origins. At first glance, this picture is borne out in Figure 6.6.4, which shows strikingly consistent combinations of individual *china* drinking vessels imported by the VOC between the 1730s and 1790s, almost exactly denoting a ratio of one saucer for every cup. The purpose of the saucer was to shield the hand from the heat of the beverage through the thin walls of the cup, and to catch any liquid spilling in between sips. Of course, the saucer itself was not to be drunk from, parodied in the 1786 exchange between the French poet Delille and Abbé Cosson, which also illustrates the material dependency of cup and saucer (Elias [1939] 2000: 84–85):

> '. . . The coffee – how did you drink it?'
>
> 'Like everyone, to be sure. It was boiling hot, so I poured it little by little from my cup into my saucer.'
>
> 'Well, you certainly did not drink it like anyone else. Everyone drinks coffee from the cup, never from the saucer.'

Despite such observations on the necessity of equal numbers of cups and saucers, it is important to stress that this seemingly European combination of vessels was neither entirely new nor entirely European. It was not Chinese either – even if it may have appeared so to some Europeans at the time. Contemporary Chinese and Japanese tea ceremonies required tea cups or bowls but not saucers (Lunsingh Scheurleer 1974: 101; Rousmaniere 2012: 76–97), helping us to evade the familiar trap of assuming that objects carry fixed meaning imbued from production (or to confuse *china* as materiality with *China* as cultural connotation). A more likely model for cultural inspiration comes from the Arabic world, where a predilection for tea and coffee cups and saucers (exclusively) can be evidenced in 1640–1649 (jumping back to Figure 6.6.1) in VOC shipments to Mocha, Basra and Gamron – precisely in the formative period before the practice of tea drinking took hold as a staple in the Netherlands. These localities received the highest numbers of dedicated tea and coffee cups in the mid-seventeenth century, as named in the VOC records, with much higher quantities than those received at the time in Amsterdam, for example (tea had only just been introduced to the Netherlands in 1637). Even though Amsterdam and its trading posts in Asia received more porcelain in general, the Middle East led the way for tea and coffee cups. While tea cups are well represented in Figure 6.6.1, coffee cups are not specified in the VOC bills of lading to Yemen and Persia at the time, although it is likely that the general 'other cups' category as well as the 'flower cups' may have ultimately been intended for coffee. This is evidenced by records from the same decade mentioning orders placed for 240,000 and 85,000 coffee cups for Mocha and Persia respectively, with further sales of 269,100 coffee cups in Persia in 1645 (Volker 1954).

The relationship between tea/coffee cups and saucers is less clear. Figure 6.6.1 shows that Mocha received the highest percentage of cups of any locality, with only a trickle of saucers going to Persia. Evidently, while a preference can be seen for saucers in Zaidi Yemen, a firm dependency of cups upon saucers had not been thoroughly established. Nevertheless, this collective evidence does suggest that a precedent for the development of what is now thought of as a European tea ritual was first established in Arabic rather than European social circles.

For further context on the origins of European tea and coffee drinking practice, let us consider the commodities associated with *china* cups on the VOC routes in more detail. Coffee was first discovered in Ethiopia and Yemen (Mocha) and quickly adapted as a social drinking phenomenon accompanied by coffeehouses throughout the Islamic world by the end of the fifteenth century (Pendergrast 2001: 5–6; Cowan 2005: 1). In contrast, whereas tea had been drunk in China since the Tang dynasty (seventh century CE), it was likewise known in Persia from the late sixteenth century, albeit without the same appeal of coffee outside aristocratic circles until the nineteenth century (Mathee 1994, 1996). In view of these historical firsts, it is thus highly likely that Arabic styles of consuming coffee and tea came to influence European material practices. This is evidenced in both the commodities (tea and coffee) and combinations of vessels (cups with saucers) being present in Safavid Persia before Europe, with the VOC and EIC (English East India Company) acting as conduit institutions. While this evidence is strong, it is highly unlikely that cultural borrowing from the Middle East was undertaken consciously by Europeans as part of their civilizing process. In fact, ignorance of the cultural genealogy of tea and coffee drinking probably aided their proliferation in Europe. As Cowan (2005: 6) discusses, there was no reason for Europeans to look favourably upon Eastern customs of coffee drinking at the time, with the Ottoman Empire in particular being widely feared for its military capabilities and despotic political system. Tea and coffee drinking were thus appropriated by Europeans in the guise of something new.

While selections and combinations of vessels for drinking tea and coffee appear to have originated in the Middle East, the enduring popularity of *china* ware as well as Chinese motifs and decorations (including the ubiquitous and endlessly appropriated willow pattern) did however ensure a place for *China* and China in the European cultural imagination. Thus *china* (and locally produced) cups and saucers became inextricably dependent on each other as well as tea and coffee, as the universal *china* ware template was particularized as part of European culture. This was not a simple European innovation or (re)appropriation, nor the straightforward blending of Chinese and European cultures; instead it represented an entangled material manifestation born of very specific globalizing circumstances, in which the VOC played a vital (if unwitting) role as the principal connector with key players in China and the Middle East.

Despite the clear disjuncture between European and Chinese (tea) drinking practices, most of the tea and coffee cups that entered Europe from China throughout the eighteenth century nevertheless appear to have strongly evoked *China* if not in their decoration (those featuring 'Chinese' images), via their form (lacking handles). One potential indicator of European innovation and design might be the addition of handles to *china* tea and coffee cups, which became the mode in European porcelain design in the late eighteenth century. While we might expect a corresponding increase in the numbers of *china* cups with handles to be imported over time (Lunsingh Scheurleer 1974: 104), Figure 6.6.5 demonstrates a more complicated picture. Not only did *china* cups with handles imported by the VOC to the Netherlands rise and then decline in number during the course of the eighteenth century, even at the height of their popularity they only constituted less than 5 per cent of the total numbers of porcelain cups imported (comparing total numbers from Figure 6.6.4).

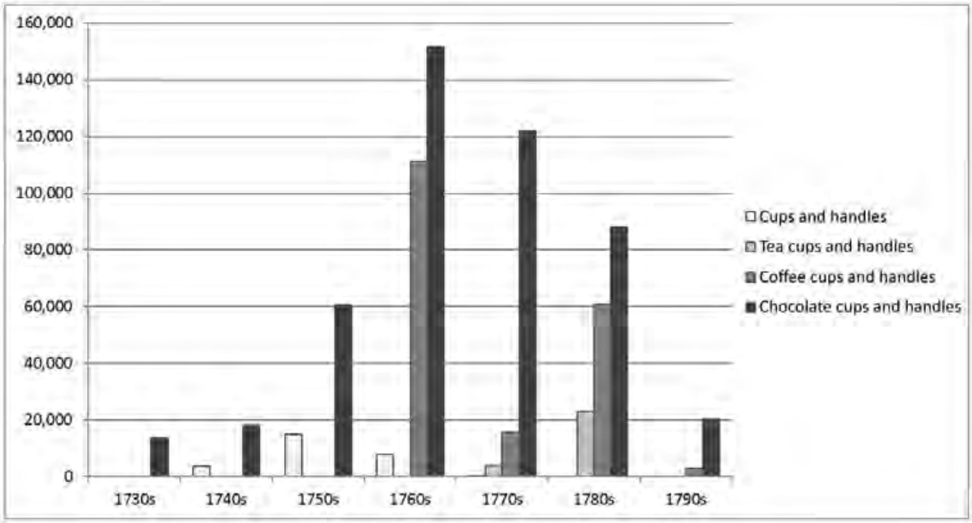

Figure 6.6.5 Quantities of Chinese porcelain cups with handles imported to the Netherlands by decade. Data from Jörg 1982

The small percentage of Chinese porcelain cups imported to Europe with handles may be surprising given the degree to which European specifications were evident in contemporary orders for *china*, or at least those for aristocratic consumers. Therefore, in considering the mass market, it is likely that the relative absence of handled cups simply reflects basic practicalities and economics – handles were more liable to break in transit, as well as taking up more valuable cargo space. Indeed, it is worth noting that the numbers in Figure 6.6.5 do not include specially commissioned private orders for wealthier clientele, including so-called armorial porcelain (featuring custom designs of European family coats-of-arms), which were more likely to feature cups with handles (e.g. Godden 1979: 195–256; Kerr and Mengoni 2011: 39–101). While cups with handles were undoubtedly desired by European consumers, it is interesting to note a letter from Dutch super-cargoes in 1778 describing the difficulty of obtaining them in Canton unless they were ordered in advance (Jörg 1982: 186). From this one might surmise that the European desire for the handle was not sufficient to overcome the inherent cultural and economic hurdles for producing and shipping handle-less cups, at least for the mass market. Alternatively, it is possible that the persistence of handle-less cups actually shaped the demand of Dutch consumers in the longer term. After all, Chinese porcelain vessels in the eighteenth century remained inherently more numerous than their more expensive European equivalents, which were principally directed at the more exclusive aristocratic market (Godden 1979: 15). Following this line of argument, the continued mass popularity of *china* cups might thus be seen as testament to the resilience and agency of the more simple Chinese export designs, or even their capacity to evoke connotations of *China* in the expanding cultural imagination of the tea drinking European middle classes.

To explore the materiality of handle-less *china* cups imported to the Netherlands, Simmel's essay on 'The handle' (1911) provides some helpful insights (Wolff 1959: 269–75). In particular, this work highlights the capacity of the vessel to stand simultaneously in the worlds of aesthetic (art) and practicality. According to Simmel, this duality is especially expressed through the handle, having a practical purpose of aiding human interaction with the vessel (in grasping, lifting and tilting), but also subject to aesthetic principles to be harmonized with the shape of the vessel's body. While the addition of handles could be done relatively inexpensively, to make this fit the prevailing aesthetic of contemporary European porcelain cups with handles would have been prohibitively expensive for the mass market. Given the huge quantities of handle-less *china* cups entering the Netherlands, let alone Europe as a whole, it is not unreasonable to raise the possibility that these vessels had collectively influenced their users – through the very material aesthetics of their elegant handle-less forms, perhaps even surpassing that of their European equivalents with handles. Thus handle-less *china* cups constituted the vast majority of imported cups throughout the eighteenth century, despite their apparent unsuitability to European practice. It appears that while economic considerations held sway over the loading of ships in Canton with handle-less cups, once this cargo arrived in the Netherlands the handle-less cups were successfully reinterpreted in everyday consumer culture.

The popularity of handle-less *china* cups in Europe has a further implication for understandings of the so-called civilizing process. The prevailing design of tea cups remained largely Chinese in its genealogy, and even if they did not always evoke consistent or realistic connotations of *China* in routine use (depending on local knowledge of the cultural biographies of the vessels), the Chinese shapes and designs had resisted European modification and arguably exerted their own agency. For mass consumers, the net effect must – if perhaps only unconsciously – have been to shape a palimpsest style of consumption informed by multiple cultural traditions starting with China, being transformed in the Middle East, to be finally repackaged and re-appropriated as something unproblematically European.

Conclusions: *china* and 'early modern' globalization

Despite the persuasive views of those who regard globalization as a long-term historical process (e.g. Nederveen Pieterse 2009), for many globalization remains synonymous with the rise of the West in the last few centuries. While recognizing the ascent of Europe from *c.*1500 as *one* significant era of globalization, this was neither the only globalizing moment in human history, nor was it wholly driven by Europe (cf. Robertson, this volume). This latter point is emphasized in this chapter through an exploration of the cultural biography and circulation of *china* ware by the Dutch East India Company (VOC), and its contribution to the development of European table manners as part of the so-called civilizing process. In the course of this exploration, I have argued that:

1. The VOC facilitated the spread of a universal global commodity (*china*) in a way that served to foster heterogeneous uses of porcelain around the world, rather than a single European model.
2. The first *china* vessels imported to Europe that gained mass popularity were typically used for local styles of consumption (e.g. klapmutsen and probably cameelscoppen) that fell out of fashion by the time the European civilizing process was in full swing in the eighteenth century.
3. The core material accoutrements necessary for Europe to undergo a civilizing process possessed a Chinese genealogy and developed from the direct imitation of *china*.
4. Regarding the development of practices of tea and coffee consumption, the European civilizing process was not entirely new, but involved re-appropriating aspects of the local configurations of *china* in cultural scenarios such as Safavid Persia and Zaidi Yemen. These localities had developed similar styles of tea and coffee consumption prior to their adoption in Europe, yet were crucially connected to Europe by their trade connections with the

VOC (and EIC). Ignorance of the Middle Eastern genealogy of coffee and tea consumption probably aided the spread of such practices in Europe, whereas the undeniable material genealogy of *china* helped promote a role for *China* in the European cultural imagination as part of the phenomenon of *chinoiserie*.

5. Some European innovations were resisted in mass *china* imports, notably the addition of handles to tea and coffee cups, with handle-less cups accounting for the majority of the porcelain market in individual drinking vessels. This highlights the continued and long-term agency of *china* in Europe at the height of the civilizing process.

A recurrent strand of these arguments is an emphasis on the agency of material culture in historical globalizing processes. Although the notion of inanimate objects having agency seems counter-intuitive (objects are usually seen as the passive subjects of human agency), this idea is less problematic along the lines articulated by Miller (2005: 11):

> Where material forms have consequence for people that are autonomous from human agency, they may be said to possess the agency that causes these effects. . . . What matters may often not be the entities themselves, human or otherwise, but rather the network of agents and the relationships between them.

Following this line of thought, it is clear that the material agency of *china* exerted a range of historically localized, as well as lasting, effects on European culture, outside the bounds of traditional narratives of the rise of capitalism and civilized table manners, or the popularization of European notions of *China* (*chinoiserie*). Understanding how and why this took place still requires further attention to the cultural biography and circulation networks of *china* ware reaching Europe. It is thus by utilizing approaches that place material culture as primary objects of study (interpretively as well as analytically) that archaeologists have the potential to bring new understandings to the broader discourses of globalization studies and world history. Materiality makes a difference, not simply to de-centre Europe in historical narratives of globalization, but to clarify the subtle ways in which everyday objects played a role in shaping culture and cultural imagination at a variety of local and global scales.

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6.7

Connecting the global with the local through the prism of imprisonment

The case of Kilmainham Gaol, Ireland

Laura McAtackney

Introduction

The study of globalization from a material standpoint lends itself to historical archaeological approaches due to the centrality of modern, European expansion – and the global networks it necessitated, facilitated and maintained – to the broader concept (including Orser 2014). However in conducting these archaeologies, often a focus has been placed on the importance of moveable artefacts to tracing global networks and mobility. As the main and most direct means of materializing trade, the moveable commodity is the most recognizable and straightforward means of exploring the meaningful constitution of contacts and networks between people and things. However, there are pitfalls to connecting globalization so completely with trade objects and using them as proxies for human connections. Pitts has argued in this volume that there is a need for archaeologists to ensure that our studies are not simply contextualizing a series of otherwise unconnected local developments. Instead we should be careful to look for direct *connections* between micro-contexts and global phenomena through different forms of circulation. With this cautionary note in mind, this chapter aims to deviate from the norm of exploring networks of moveable things and focusing on trade. Instead it will view globalization through a static rather than moveable form, with an emphasis on deciphering personal and communal relations and meanings from those who deliberately left readable traces on a prison. By using a fixed structure, and extant graffiti created in the closing years of its functional life, this chapter argues that we can access globalization and the complicated processes it created and materialized in a number of ways, including examining evolving ideas of individual and communal identity, locating local expressions of global events and identifying changing cultural norms and ideological perspectives during a period of cataclysmic change.

The nature of the building that will be the focus of this paper – Kilmainham Gaol in Dublin, Ireland, which operated as a prison from *c.*1796 to *c.*1924 – is an appropriate case study in globalization for a number of reasons. It has direct links to many threads and manifestations of late modern globalization, especially those linked to ambiguous individual and communal responses to colonialism and the impact of the state institutionalizing its citizen body as a means of social control (resulting in the highly effective hybrid form of the "colonial institutions": McAtackney and Palmer 2016). Focusing a study of globalization on what effectively is the biography of a building follows an established tradition in materially focused globalization studies that have creatively developed the concept of "object biographies" (Appadurai 1988) to explore the evolving and long-term contexts of objects. The benefits of such an approach are particularly apt for globalization studies and, I argue, in this case can be adapted to include architecture. While Buchli has argued that the relationship between architecture and artefacts is that the former is the structuring device to reveal the agency of the latter (1999), one can also explore the building as a form of object in itself. Exploring Kilmainham Gaol through an object biography approach can be achieved through looking at continuities and change of the material form of the actual building over time. In the context of this study, there remains a large assemblage of graffiti that can be confidently dated to the closing years of the prison's functional life, which allows one to use the Gaol as a form of canvas that has temporal, spatial and contextual dimensions that allow its changing meanings – and those of the people who engaged with it through graffiti – to emerge. Taking such an approach can extend the study of the prison beyond the traditional limitations imposed by local and national historical narratives that focus on specific events or individuals. This is particularly helpful in the context of early twentieth-century Ireland and the continuing influence of its so-called "revolutionary generation" (e.g. Foster 2014), which continues to inspire highly specific and politically charged histories. By locating global processes through the biography of Kilmainham Gaol, this chapter aims to provide multi-perspectives that link to very different individuals and collectives associated with the building in its twilight years.

Kilmainham Gaol reveals direct links to a number of aspects of globalization throughout its life as a functional prison. The global spread of Republicanism in the aftermath of the French Revolution, particularly in colonial contexts such as North America and Ireland, is evidenced by some of the first prisoners held in Kilmainham Gaol being United Irishmen who claimed direct lineage from the global surge in revolutionary politics at the time (Whelan 2004). Later, Kilmainham became a centre for transportation to the British colonies, a process whereby Britain deposited vast numbers of its underclass and criminals to the Caribbean, North America and Australia. Kilmainham Gaol was the main holding centre for Australia prisoners from the mid-nineteenth century until transportation ended in 1868. Analysis of the building materials and structure reveal that it is an interesting case study in the global processes of institutionalization of citizens by the state and particularly within the context of a long-term, if atypical, colonial relationship. The prison design, with the two wings being very different manifestations of evolving conceptions of prison reform (one designed by John Howard in 1790s the other inspired by Bentham's Panopticon in the mid-nineteenth century) provides a material case study of the increasingly global conceptions of the role of imprisonment within the modern nation station, moving between punishment, retribution and/or reform.

However, it is the survival of extensive graffiti assemblages, largely dating from *c.*1910 to *c.*1924, which are of particular interest in this chapter. The extant graffiti reveals the interaction of a number of global processes with the local conditions of imprisonment in Dublin articulated through a number of individuals and collectives held at the site. After a short history of "Revolutionary Ireland" and Kilmainham Gaol, this chapter will consider how this standing structure acts as an intriguing if unusual case study in archaeological studies of globalization. It will argue that Kilmainham Gaol locates local manifestations, as well as individual experiences, of contemporary global processes that are retrievable from the writing on the walls. This includes the globalization of warfare and the impact of the movement of women into the public domain as a result of international suffrage movements. Through exploring Kilmainham's graffiti as a form of "imperial debris" (Stoler 2008) this case study in globalization aims to answer Knappett's critique, in this volume, of archaeological studies focusing on the material and spatial, whilst infrequently being able to retrieve the social.

Revolutionary Ireland

As we move through what has become known as "the decade of centenaries" in Ireland the period from *c*.1912 to *c*.1924 is increasingly being situated in academic discourse and the public arena as an epoch-defining time within a global context of mass and somewhat catastrophic change (e.g. Foster 2014). When one considers the events that occurred in Ireland during this period, this definition does not appear hyperbolic. From the class conflicts of the Dublin Lockout in 1913 (Yeates 2000) to the global reach of World War I (where between 30–49,000 Irishmen died in combat: Fitzpatrick 1997), through the increasingly volatile suffragette struggle for women's rights and nationalist struggles for retention/independence, this was clearly a time of great change that both fed from and inspired change elsewhere. However, while the Easter Rising (1916) and War of Independence (1919–1921) are rightly considered seminal events in the creation of the Irish Free State, uncomfortable narratives are often overlooked and global connections missed. The Irish national question was a complicated issue that directly linked into the global nature of the British Empire. Irish nationalists looked to the cessation of America, the partial extraction of Australia and the clamour for independence from India as global templates, but we often forget how loyalty to the British Empire was equally mirroring global trends. The fervent desire of Unionists in Ulster to stay within the United Kingdom, leading to partition of the island in 1920, was equally linked to a globalism that was counter-revolutionary and mirrored in heavily Anglicized colonies that maintained strong and loyal links to Britain, such as Canada and post-Boer War South Africa. Many studies treat the island of Ireland as two separate entities long before they were officially partitioned (see Fitzpatrick 1998 for an example of an all-Ireland historical study) and thereby perpetuate singular, nationalist narratives of identity that do not reveal the true complexities of the period and their links to competing global processes.

Clearly the events that occurred in Ireland during this long decade were not isolated occurrences, unaffected by major events stirring beyond its shores. Indeed, the interconnections between the events in Ireland and the international rise of Bolshevism (and its impact on increasingly widespread and violent workers' protests), the global impacts of World War I and the increasing disintegration of European colonial control have all been explored to different degrees elsewhere. The opportunity many Irish nationalists saw for at least a limited degree of independence during the World War I are well explored (e.g. Grayson 2012). Direct connections with other colonies in Britain's global empire have also featured, particularly in postcolonial and feminist studies where personal networks created between Ireland and India have been situated as indicative not only of knowledge of international anti-colonial movements, but evidence of attempts to co-ordinate them (e.g. Candy 2000). Although still in a minority in historical studies this wide, global perspective has facilitated an interpretative move away from wholly nationalist and revisionist histories to transnational models that are less inward in perspective. In taking a global perspective, we can move beyond traditional views that Ireland's political revolutions were both isolated and inevitable (e.g. Zalewski and Barry 2014). Instead, such a perspective reveals that seismic changes in Ireland at this time were contingent on an internal desire for change embedded in global processes and events.

In this context Kilmainham Gaol becomes the perfect site to explore the role of global processes, ideas and the changing status quo as they played out in Ireland's rapidly changing colonial polity through a number of different agents who left traces within the structure. Prior to its final dereliction in the aftermath of the Irish Civil War (1922–1923), Kilmainham Gaol was already an important symbol for nationalists of the desire for Irish independence due to its link to insurrection from its first prisoners in the late 1790s through to the imprisonment of the Irish Parliamentary Party MP Charles Stewart Parnell in 1882. Its closure as a convict prison in 1910, and its extraordinary reopening to hold only political and military prisoners, cemented this connection and ensured that the graffiti remnants at the site date only from the revolutionary period. This time-capsule assemblage makes Kilmainham Gaol an interesting case study in exploring Ireland's link to global processes in the early twentieth century.

Kilmainham Gaol: "the bastille of Ireland"

A brief plotted history of Kilmainham Gaol could begin with its opening in 1796 as the new Dublin County Jail, based on the ideas of the British prison reformer John Howard. One wing was substantially remodelled in the mid-nineteenth century, based on the panopticon design, with reference to the ideas of the prison reformer Jeremy Bentham, and it continued to function as a prison until 1910. A number of major social changes are associated with the prison: including its role in housing an extensive population of the lowliest during the Great Irish Famine (*An Gorta Mór*) in the 1840s. One could also mention its enduring connection with political incarceration in Ireland being cemented when the East Wing was cleared and secured for large numbers of Fenian prisoners in the 1860s onwards (O'Sullivan 2007). Its link to gender and conceptions of age and appropriate punishment are evident from it becoming a men-only prison in 1881. However, it is the life of the prison *after* its official closure in 1910 that reveals its most notable links with global processes and political currents. It is from this time that the jail, too decrepit to be viable to hold ordinary, criminal prisoners, held only special category prisoners at times of extraordinary change. Equally extraordinary is the degree of freedom of association, action and expression that these prisoners (and other residents) of the jail had that ensures that their presence remains – if partially – to the present day. Graffiti assemblages created during the twilight years of the prison's semi-official functioning – when it was a British military barracks that also imprisoned errant soldiers and held prisoners from the Easter Rising (1916), the War of Independence (1919–1921) and the Civil War (1922–1923) – are an incredibly fortunate survival that explicitly reveal how this dark and forbidding building was linked to a number of global processes at a time of great change in both Ireland and the wider world.

That we are able to locate and decipher these graffiti traces today is a result of a post-closure narrative that is almost as complex and entangled with its wider society as the functional life of the site. Kilmainham Gaol, like many prison heritage sites, experienced a transition from functional institution to national heritage status that was both long and protracted. This is a common experience in such institutional remnants, as there is often little societal reason for prisons to transition from a functional to cultural value, except when imprisonment (often resulting from civil conflict) has played a central role in determining the nature of the state (McAtackney 2014). Neil Jarman (2002: 290) has commented in the context of Northern Ireland that prisons are difficult to manage in a post-conflict context because they have the ability to materialize both the vulnerability and power of the state, which can result in opposing opinions about their future usage. It is hardly surprising to learn that Kilmainahm Gaol lay derelict for over 30 years post-closure before a voluntary body – the Kilmainham Jail Restoration Society – was granted permission from the government to renovate the prison in time for the fiftieth anniversary of the Easter Rising in 1966 (O'Dwyer 2010). While the renovation of the prison mainly focused on the panopticon East Wing of the prison – resulting in plaster being chipped off cell walls and extensive repainting of walls and doorways – the West Wing was left relatively intact. It is the assemblage of graffiti from the West Wing that will primarily be used to provide evidence of the connection between this historic prison site and major global events and processes occurring beyond the prison walls.

The writing is on the wall: archaeological approaches to graffiti

The West Wing of Kilmainham Gaol is arranged across three perpendicular corridors over three floors (with the top floor arranged over two corridors). It contains graffiti throughout, which reveal a variety of perspectives, responses and aims of the site in its final years. This includes, but is not exclusive to, graffiti statements proclaiming a perceived or desired state of being, graffiti conversations sustained over extended periods of time and even emotional responses demanding to be acknowledged. The graffiti was primarily created by engraving under or over the top layer of whitewash or the use of pencil primarily over the whitewash. The graffiti, although covering a short functional period of the prison (*c.*1914–*c.*1924), provides insights into the complex meanings and interactions contained within the building during this period of revolutionary change. This graffiti assemblage contradicts ideas that graffiti is primarily an output of male criminality and is used as a means of contesting power (Ferrell 1996; Macdonald 2001) or that it acts as a mirror of the social self (Abel and Buckley 1977). Rather, the extant graffiti at Kilmainham Gaol provides a multilayered and complex case study that is spatially, temporally and socially constructed and meaningful. Recording, interpreting and synthesizing the graffiti through an archaeological perspective reveals that not all graffiti is the same. It cannot all be interpreted as an act of defiance or an individual response, but rather it is a multi-dimensional weapon used to sustain, contest or proclaim states of being that, in this context, are situated from perspectives as disparate as gender, national and local identity, memory, and ownership of the past – as well as the present – that link to global as well as local issues.

Methodologically, a graffiti study of a long abandoned site, which has become an official site of "dark tourism" (Lennon and Foley 2000), presents many challenges. While Kilmainham Gaol has transitioned to become one of the most visited heritage sites in Ireland, an initial policy avoiding any mention of the Civil War connection (O'Dwyer 2010: 36) resulted in the East Wing being heavily restored and its Civil War graffiti largely removed. After this heavy-handed renovation, the custodians reverted to a policy of limited intervention with the crumbling remains and the now locked cells reveal decades of neglect. Photographs taken from the 1960s through to the 2000s (O'Sullivan 2009), act as a comparison to the present day, revealing the ongoing disintegration and loss of graffiti over the intervening years. However, a systematic graffiti survey of the West Wing conducted over six months in 2013 has revealed hidden interactions that create an extensive photographic record of over 6,000 images. This assemblage gives a broad overview of the range and forms of graffiti created in the prison in its closing years.

Graffiti is increasingly being incorporated into historical (and other) archaeologies. However, there is often a lack of methodological and theoretical direction on what modern graffiti is, how to record it and how to interpret it individually and collectively. Archaeology has developed graffiti methods and theories from the study of rock art, which has a significantly longer trajectory in archaeological studies. However, methodological best practice, in seminal works such as Chippindale and Taçon (1999), tend to reference modern graffiti only as an analogy rather than an inclusion in their wider definition. A notable and recent break from this tradition is Oliver and Neal's volume on "wild signs" in history and archaeology, which provided some refreshing ideas about how we define and interpret graffiti interactions with an emphasis on including historical, social and material context (2011). Likewise there has been a wide range of institutional graffiti studies pioneering archaeological perspectives, particularly exploring prisoner graffiti (including Casella 2009; Frederick and Clarke 2014). By exploring the links of institutional graffiti with globalization, this chapter posits that archaeologists can move from concentrating on recording individual and particular graffiti examples to dissecting the networks and interconnections that this graffiti often implicitly references and emerges from. To illustrate how this can be achieved in the case of Kilmainham Gaol, this chapter will conclude by examining two examples of graffiti that not only link to globalization and contemporary global processes but also interact with, extrapolate and extend these issues as relevant to the graffiti creator at that time and place. These case studies are military graffiti and gendered graffiti.

Globalized graffiti at Kilmainham Gaol

The oldest piece of extant graffiti at Kilmainham relates to a piece of slate that was carefully, and beautifully, engraved in 1798 by Patrick McCann "of the county Down", which continues to reside in the non-cellular room, where it was located during the restoration period. This is an unusual find and may have survived because it was "covered over by the jailers" in a room that was reserved for high-status prisoners located in the administrative rather than cellular area (Coyle P61/19). However, it is an anomaly as there are few datable pieces of graffiti throughout either wing that can be linked to the period before the initial closure of the prison in 1910. This was probably because the act of creating graffiti was punished more severely when the prison acted as a "criminal" holding centre, or that engravings still decipherable below the whitewash were not dated (indeed there are a number of examples of boats and a hangman that, although undated, suggest a nineteenth-century date of creation due to their subject matter) and so cannot be ascribed. However, it is clear that in the twilight years of extraordinary happenings Kilmainham Gaol graffiti took on an almost industrial scale of production. The West Wing reveals graffiti traces in most cells, rooms, corridors, doorways and stairways. The only exceptions are of a small number of cells that have been thoroughly whitewashed since the restoration (possibly for the benefit of film crews who used the site as a film set from the 1960s onwards). The scale is extensive despite, after the reopening of 1910, periods of mass and sporadic whitewashing being recorded in government files (the last mass whitewash was in 1922, prior to the introduction of women to the prison) up to the closure of the prison in early 1924. These attempts to cover graffiti were not always successful; often the whitewash was thin, it was unevenly and carelessly spread or it was washed away by subsequent water infiltration as the building transitioned from abandonment to dereliction before the restoration began in the early 1960s. The result is an uneven graffiti assemblage that has ambiguous stratigraphy, with notable lacunae, specific patches still covered with whitewash on walls that also contain earlier graffiti traces now peering through the incomplete top layer. Such a surface provides methodological and interpretative challenges for archaeologists, but there are clear periods of usage that are presenced, even if at times only glimpsed, throughout the jail that provide insights into how this site interacted with global processes in these final, atypical years of its functional life.

British soldier graffiti

One of the more unusual graffiti remnants in this prison now so strongly associated with the fight for Irish independence is the evident presence of British soldiers in the years before, during and possibly after World War I. Often quoted as a game-changing event in the history of modern globalization, World War I is frequently presented as an international war that, although primarily fought in Europe, brought together global interests, markets, commodities and revolutionary repercussions that reverberated around the world (e.g. Sondhaus 2011). The international nature of this conflict is evident on the walls of Kilmainham Gaol, as soldier graffiti covers large swathes of cell walls in both the West and East Wings. Largely confined to the lower floor of the West Wing and evidenced on the backs of cell doors in the East Wing, the preoccupations of the British soldiers with their changing, globalized world can be viewed not only in the graffiti they have created but also in the types of men who have been brought together, if fleetingly, in this crumbling jail.

The range of subject matter evident in the graffiti created by the British soldiers marks a stark contrast with the more monolithic concerns of the pro-independence (and later anti-Free

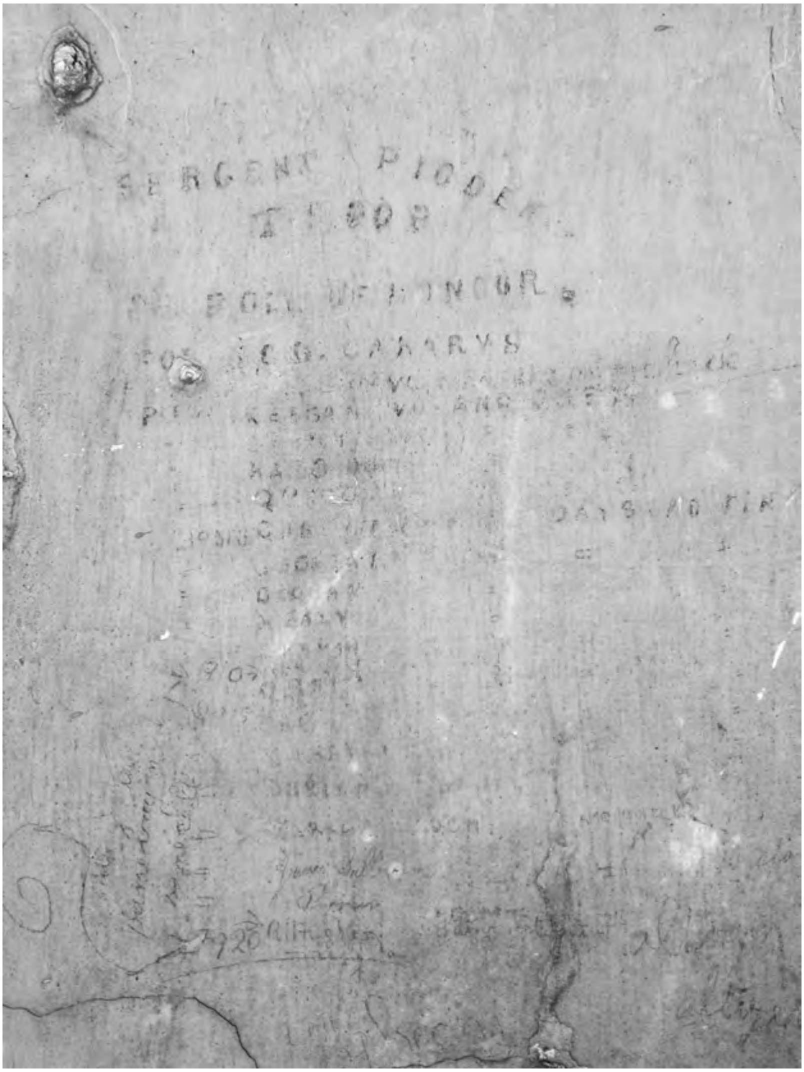

Figure 6.7.1 Example of faded pencil graffiti relating to a British soldier's previous tours of service "Seargent Pigder?/T?808/Roll of Honour" located in a cell on the bottom floor of West Wing, Kilmainham Gaol (© McAtackney 2013)

State) pronouncements of the political prisoners held in the aftermath of the 1916 Easter Rising onwards. As Kilmainham Gaol was being used prior and during the early years of World War I to both barrack and imprison British soldiers (often for petty offences), military matters and the war are notable throughout the graffiti assemblages. Identifying text, what Eleanor Conlin Casella has called prisoner "testimonies" (2009: 174–75) is the most common graffiti form in all assemblages. Therefore, it is usually relatively easy to identify military inhabitants due to the frequent inclusion of their name, rank, regiment, company, battalion and even identifying serial number. Although only partially decipherable due to years of decay, there are a number of soldiers who appear to have listed the tours of duty they completed and the battles they survived (Figure 6.7.1). They reference an "othered" version of their enemy in pictorial form – including a side-profile of a soldier in a Prussian helmet (Figure 6.7.2) – death-heads and other more demonic representations that also probably relate to this otherwise unnamed adversary. As these are rather stylized images, it is unclear how much they are influenced by any physical contact but it is clear that the more global form of warfare they are involved in has allowed a visual shorthand for the "other side", including a focus on Prussian helmets. Of course there are also a number of references to the reason why the soldiers are being held within the cells of the jail, some of which are less than complimentary about their treatment (including "Pte R Hughes/doing 21 days in this cell/for fuck all"). Likewise, they reveal an interest in the realities of an ongoing, non-military world with drawings of young (often naked) women, including a depiction of a contemporary Hollywood movie star, Pearl White, an American stage and film actress who was popular at the time. She is depicted with the phrase "Are you Pearl White?" written around the frame.

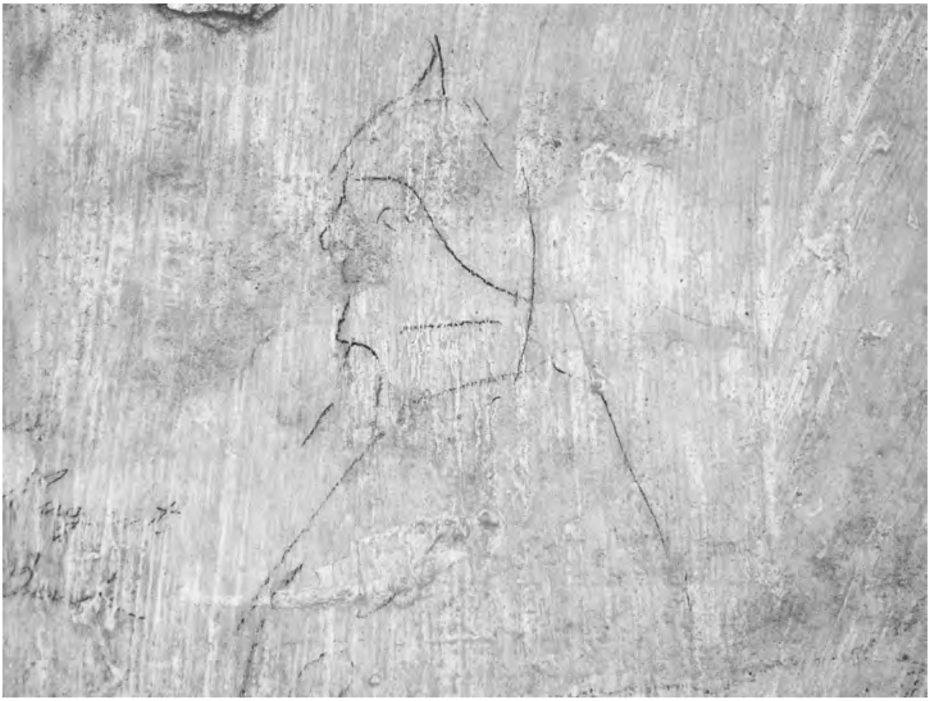

Figure 6.7.2 Pencil graffiti of a side profile of the head of a male wearing a Prussian style helmet. Located in a cell on the bottom floor of West Wing, Kilmainham Gaol (© McAtackney 2013)

Through the combination of names and other identifying information Paul Turnell, an independent researcher, has been able to locate the military records for a number of the inhabitants that provides interesting information for several reasons. The majority of the identifiable soldier text indicates that the soldiers are from a number of regiments, and originate from across Great Britain, Ireland and perhaps further afield. The gathering together of this otherwise disparate group of young men reveals the globalized reach of the Empire-wide British Army, with the identification of soldiers born in England, Ireland and possibly Canada and Australia being barracked and held at Kilmainham Gaol. The graffiti reveals a significant number of Irish-born British soldiers materializing in graffiti form the diversity located in the British Army, and the level of Irish involvement within it, at this peak of the British Empire. Their presence represents a deeply entangled, colonial narrative of Irish soldiers who enrolled in huge numbers before, during and after World War I that has until recently been largely obfuscated from Irish histories of the period (Jeffrey 2011). The hierarchies within the British Army are clearly engraved in the walls, as graffitiers are always low-ranking Officers. At the level of Private, these soldiers were commonly the cannon fodder of World War I battlefields, so it is to be expected that those soldiers who were located in Turnell's research often did not return to their home city within the British Empire. Sadly for every William Corri, a Private in the Royal Dublin Fusiliers, who was awarded a Victory Medal and British War Medal on the conclusion of the war, there is a Private Patrick Reddy. Reddy was a married Dubliner and member of the Royal Inniskilling

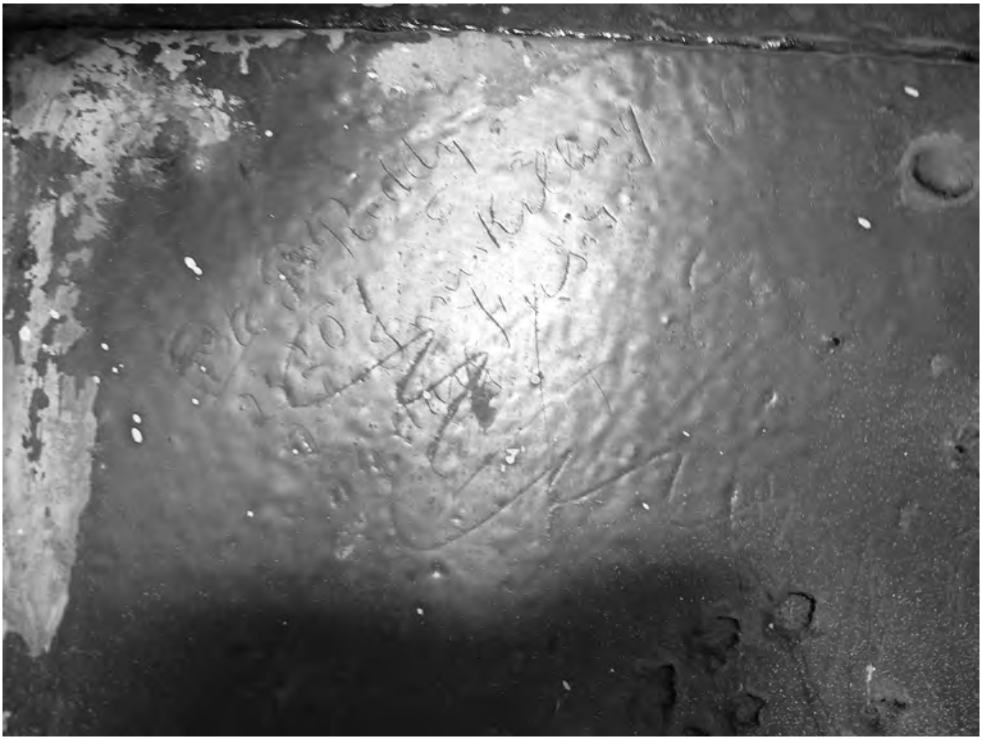

Figure 6.7.3 Scratched graffiti on back of cell door in a cell on the middle floor of East Wing with evidence of partial defacement: "Pte P Reddy". Private Patrick Reddy was a married Dubliner and member of the Royal Inniskilling Fusillers, A Coy, Eighth Battalion, who died in action on 16 August 1917. (© McAtackney 2015)

Fusillers, A Coy, Eighth Battalion, who died in action on 16 August 1917 (Figure 6.7.3). These poignant graffiti traces are important, as they represent some of the last surviving traces of a diverse group of British soldiers, pulled from all the corners of an already creaking Empire, who were momentarily housed in this semi-derelict building on the outskirts of Dublin. Little did they know that this wreck of a colonial institution that housed them while the first modern, global war awaited them on the Western Front was to become (eventually) a nationalist heritage icon in a soon-to-be independent Ireland.

Gendered graffiti and the hidden role of women during the revolutionary period

Ireland's role in the increasingly vocal and widespread campaign for women's suffrage was prominent in the early twentieth century; however, this is not always clearly articulated in histories of the period. The reasons for women's exclusion from this period are not as straightforward as the tendency for conservative countries to produce androcentric histories that elevate "great men" whilst reducing prominent women to footnotes, although this is a factor. There are a number of complicating factors that have reduced the emphasis of women's roles in this period, including the imposition of a border ensuring that Irish history has taken on a 26-county bias rather than focusing on the entire island. Margaret Ward has argued that the most militant female suffragettes were active "in Antrim and Down, not in Dublin" and the implicitly political decision to ignore Northern Ireland when writing "Irish" history has skewed our understandings of female activism in the years immediately prior to partition (1995: 128). There is also the issue that women's active support for suffragism was deeply impacted by the unfolding events in Ireland during the revolutionary period. While support for suffragism reached its peak in Ireland in the years immediately preceding World War I, after the Easter Rising many of the women decided to prioritize the national question, or rather this decision was forced on them as the heightened political situation left little room for feminist politics (Ryan 1995: 491).

With notable high-prolife exceptions, namely Hanna Sheehy-Skeffington, many of the women active in suffrage increasingly believed that a free Ireland would bring them the equality they protested and their loyalties shifted. The figure of Countess de Markievicz, who became the first female MP elected to the British House of Commons in 1918, was extremely influential as both a woman of high rank and a nationalist in swelling the ranks of the Irish women's nationalist movement *Cumann na mBan* to the detriment of the suffrage organizations (Ward 1995: 145). Following Louise Ryan, it is clear that women's political roles and identities greatly changed during this period and they need to be understood in the context of their interconnections with global, anti-colonialism as well as suffrage movements. She argues that it is better to explore the links of Irish women with other anti-colonial suffragettes, such as in India, to understand the complexities of their responses rather than their sometimes ambivalent relationship with their British counterparts (1995).

Women were active in suffragette protests; they were arrested and imprisoned (often for short periods due to suffragette propensity to hunger strike and hence be swiftly released) in Ireland from 1912 onwards. For a short time there was active cooperation between Irish and British women's organizations, with the more militant English women disrupting political visits to Dublin, including throwing a small hatchet at the Prime Minister H. Asquith on a visit to a theatre (Ward 1995: 133–34). Women imprisoned for suffragette activism during this period were held in Mountjoy Jail in Dublin or in Armagh; both institutions had separate holding facilities for women. They were not imprisoned in Kilmainham Gaol until the more internecine unpleasantness of the Irish Civil War. The women who were moved en masse to Kilmainham Gaol in November 1922 (and were the only prisoners there until May 1923) no longer explicitly aligned themselves with international suffrage movements, but their stance during the Civil War was determined by the pro-suffrage ideals that had occupied much of their activism prior to the tumults of the Rising.

On 11 January 1922, the 26 members of the executive committee of *Cumann na mBan* met to discuss their official reaction to the recently signed Anglo-Irish Treaty (December 1921), which afforded partial independence from Britain alongside partition of the island. This first vote, which was later reaffirmed by the membership of the organization in February, set the women of *Cumann na mBan* as the first political organization to declare themselves anti-Treaty. Although their decision to reject the Treaty was wrapped up in nationalist rhetoric, it was also clear in their proclaiming for a Republic, as envisaged by the leaders of the Easter Rising, that women's roles in the new Ireland were also foremost in their head. One of the leaders of *Cumann na mBan*, Mary MacSwiney, was reported in the pages of the *Irish Times* as stating in a speech to delegates: "she was fighting for the right for women to take their places in the councils of the nation . . . and women were entitled to voice their opinion whether the men do so or not" (quoted in Matthews 2010: 318). However, the women were not successful in turning public and political opinion. As the pro-Treaty side won the political argument, the anti-Treaty side moved to opened defiance and so the Civil War began in the summer of 1922, with many women finding themselves interned in Kilmainham Gaol.

For the first time, nationalist women saw themselves targeted for communal political imprisonment. The women were held in both the East and West Wings of Kilmainham Gaol and left the indelible mark of their imprisonment, and the mixed loyalty of their politics, behind in the graffiti. Many of the largest and most ornate graffiti examples in the West Wing were created by the women and despite many examples having been lost to whitewashing, decay or vigorous "renovation" in the opening years of the restoration (including all but the doors and surrounds of the East Wing), there are substantial traces of the women's imprisonment and their experiences in situ. They provide particularly vivid, gendered experiences of political imprisonment at the point when Ireland was transitioning into the early stages of decolonialisation and had begun to imprison those "unmanageable revolutionaries" (Ward 1983) who believed they had been promised the type of equality that only complete independence could provide.

Of the 6,000 images taken during the Kilmainham Gaol Graffiti Survey in 2013, the vast majority record graffiti created by the women who were housed across both wings of the prison. The best survivals, in the West Wing, give us some ideas of how the walls throughout the jail were decorated with slogans, verses, Celtic imagery, religious figures and group insignia. These large renderings were positioned across the walls but were surrounded by a significant number of portraits, testimonials of the women who had been imprisoned, as well as more mundane materializations of time passing, games being played, county loyalties being proclaimed ("Up Dublin" being a frequent graffiti refrain) and even notes of where a hidden tunnel had been started in the basement. The circumstances of the Civil War – where previous comrades became bitter enemies – meant that these female Republicans emphasized the betrayed aspirations of their nationalist predecessors. Much of their graffiti glanced backwards, focusing on the promises of equality of those who fought for a Republic on Easter 1916, rather than the limitations of the Free State treaty. Not only did such an emphasis tie into the aspiration of the women, as anti-Treaty Republicans, but it also had a strong material connection to Kilmainham Gaol. It did not escape the attention of the prisoners, or the discomfiture of the prison guards, that the majority of the executed leaders of the Easter Rising (1916) were held (and executed) at this very site. Indeed, it is clear from the women's autograph books and graffiti that they explicitly articulated this link to the Rising's aspirations through the material structures of Kilmainham Gaol. They did so in graffiti quoting the ideals of dead leaders, including the Mayor of Cork, Thomas MacSwiney (the

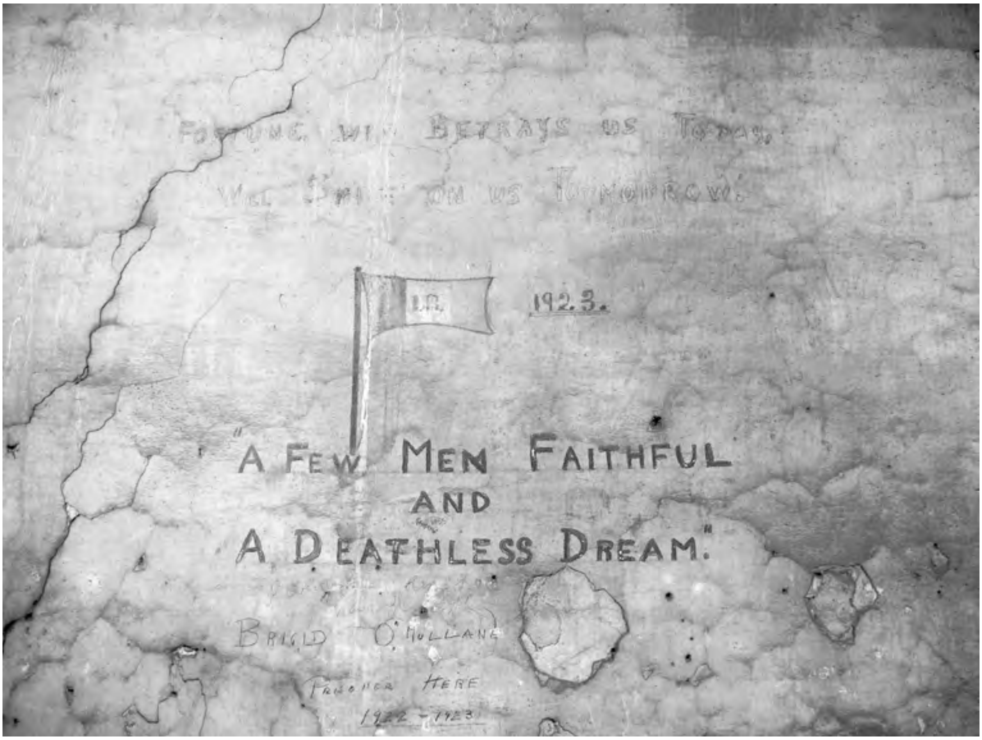

Figure 6.7.4 Painted graffiti on a cell on the top floor of the West Wing, later identified as having been created by Brigid O'Mullane while interned at the site during the Irish Civil War (1922–1923): "Fortune who betrays us today/Will smile on us to-morrow" [Irish Tricolour flag with "IR" "1923"] A few men faithful/and/a Deathless Dream" (© McAtackney 2013)

brother of one of the female leaders, Mary MacSwiney), who died on hunger strike in Brixton Prison in 1920. A quotation from a play appears as a large slogan in the top floor cell of Bridget O'Mullane: "Fortune who betrays us today/Will smile on us to-morrow'[Irish Tricolour flag with "IR" "1923"] "A few men faithful/and/a Deathless Dream" (Figure 6.7.4) and a now long decayed, and indecipherable, quotation can be found in the cell of Sighle Humphries.

During the tumult of the Civil War, Republican's designated their official commemoration of the Easter Rising to the women in Kilmainham Gaol in 1923. This occasion was ornately depicted in a number of autograph books circulated by the women during their period of imprisonment. Clearly the material and structure of the building acted as a touchstone for the ideals of 1916, with commemorative acts moving through the interior and exterior spaces: flags being unfurled in the prison yard and speeches, prayers and pageants performed there and in the wings. Details of the commemorations also revealed a hierarchy amongst the women, with the important acts of the commemoration performed by those women who had an intimate connection to the dead men; Grace Gifford Plunkett (who married her husband Joseph Plunkett in the prison chapel hours before he was executed in 1916) was involved in many readings and the unfurling of flags in 1923. Nora Connolly O'Brien delivered a talk about the life and thoughts of her father James Connolly (who was executed in 1916). Through these acts the women reaffirmed not only the Easter Rising as their right, but implicitly condemned the concession of the Free State that imprisoned them.

In an even stronger articulation of their role as women involved in the fight for independence that linked to their suffragette ideals, the women gendered many of the slogans they placed on the wall. One slogan that was frequently repeated with an explicit reference to the women is also replicated throughout their autograph books:

> The Will of the people must prevail
>
> With the Boys in the Camps
>
> And the Girls in the Jail. (Gleeson)

Likewise, many of the autograph books and graffiti warn of trusting young men, especially those from the Free State. One piece of graffiti includes a stick figure of a male and female holding hands with the cautionary note: "Annie Fitzsimons/Arrested March 20th 1923/[At Findlaters Church. I met my doom]/Keegan was his name/[scribbled out] May/[Picture of man and woman holding hands]" (Figure 6.7.5). Clearly, alongside the women publicly identifying as Irish Republicans they were fundamentally presenting themselves within global narratives as independent embodiments of suffrage demands for a greater role in not only their own lives but the direction of their nation and its politics.

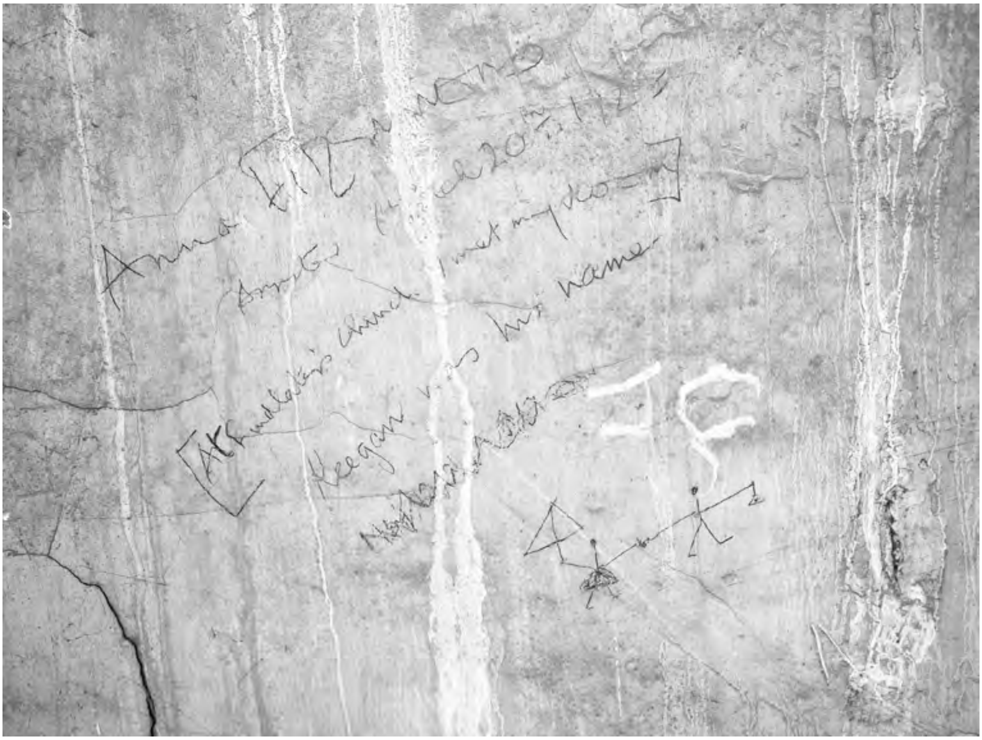

Figure 6.7.5 Pencil graffiti located in a cell on the middle floor of the West Wing: "Annie Fitzsimons/Arrested March 20th 1923/[At Findlaters Church. I met my doom]/Keegan was his name/[scribbled out] May/[Picture of man and woman holding hands]" (© McAtackney 2013)

Conclusions

Hitherto, the emphasis of archaeological studies of globalization has been to elevate the role of moveable commodities that materialize links of trade, exchange and economics rather than interconnections of people, ideas or conceptions of the world. In contrast, this chapter has chosen to take a historical case study, exploring a static entity that is both a materialization of colonialism and institutionalization in order to examine personal and group links to processes, events and ideas that link the global with the local at a time of great change. Through the recording, deciphering and interpretation of a substantial assemblage of graffiti dating from the period now known as "revolutionary Ireland", we are able to see how some of these global events and ideas take material form, and local expression, at Kilmainham Gaol in Dublin.

Taking two case studies – male military graffiti and female nationalist graffiti – this chapter has revealed how the inhabitants of Kilmainham Gaol used graffiti to articulate their very different connections to global events and issues. On the eve of World War I, the soldiers barracked and imprisoned at Kilmainham reveal that the British Army maintained a global-wide personnel with a substantial number of regiments containing British, Irish, Canadian and even Australian men. Their graffiti reveals a variety of interests, which although referencing their military "families" and caricatures of the enemy "hun", also link to everyday concerns of young men interested in the opposite sex and popular culture. In contrast, it is clear that although many of the women involved in the revolutionary period had chosen to abandon suffrage politics for the all-consuming national question, their identities were still entwined with ideas of female equality in the "new", independent Ireland. Their conceptions of this equality were much more entrenched in the ideas of the Republic as conceived at the Easter Rising – of full independence from Britain and retention of the entire island – and their treatment in the Free State indicates that the perception of their reduced status was prophetic. Their graffiti is greater in range and number but more directed to personal testimonies and political statements, with little individualization. Perhaps these different individual and communal responses reveal how much more conforming to political ideals the Civil War women were in contrast to the First World War soldiers? By examining conceptions of globalization through the prism of prisoner graffiti it is hoped that the interaction between global and local, the emphasis on social as well as economic, and the consideration of changing conceptions of time and place can be more fully included in future studies.

Acknowledgements

I would like to thank Dr Katherine O'Donnell, my mentor at the School of Social Justice, UCD, for her support during the fieldwork at Kilmainham Gaol. I must also extend her thanks to OPW for facilitating access to the site and particularly Niall Bergin for highlighting histories of the jail that were otherwise uncoverable, even through the prism of prison graffiti.

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Part VII

Mediterranean

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7.1

The global Mediterranean

A material–cultural perspective

Miguel John Versluys

Initially, it might seem odd to encounter the Mediterranean as a separate section of the global overview provided by this book, amongst geographical units like Asia, Africa and Europe. Seeing that the Mediterranean in fact belongs to all three units, the distinction is indeed unusual. However, it is not without reason that Jean Cocteau famously characterized the Mediterranean as a 'liquid continent'. Moreover, it has always been much more than a geographical expression alone. A variety of recent publications shows how useful and apparently logical it is to write histories of the Mediterranean (Norwich 2006; Abulafia 2011; Broodbank 2013; Horden and Kinoshita 2014 have now provided a *Companion to Mediterranean history*), as do recent politics aiming at a future for the Mediterranean – the Union for the Mediterranean (UfM) was created in Marseille in 2008. In an unsettling and confronting way, the current refugee crisis once again underlines the importance of the Mediterranean for Asia, Africa and Europe alike.

What could the Mediterranean, as a unit of analysis, add to debates about globalization and archaeology that are central to this volume? In what is still probably the most influential history of the Mediterranean, Braudel ([1949] 1966) argued that (defining) the Mediterranean was fundamentally about ecology. His successors, Horden and Purcell (2000), did the very same thing, albeit from a radically different perspective: instead of the (geographical and economic) unity of Braudel, they focused on fragmentation, uncertainty, fluidity and connectivity. This 'ecological approach' has triggered critiques of 'sociological blindness' and indeed Braudel as well as Horden and Purcell are presenting an environmentally determined history of the Mediterranean rather than its cultural history or, in other words, a historical anthropology. Central to such sociological, anthropological and cultural definitions is the difficult question of whether or not we can speak of the existence of Mediterraneanism in these terms – a question that remains heavily debated (Malkin 2005; Morris 2005; Abulafia 2011; Broodbank 2013; Horden and Kinoshita 2014).

Although this section comments on the problem of Mediterraneanism in sociological terms directly and indirectly, it basically aims to do something else. Instead of explaining the Mediterranean and Mediterraneanism in terms of either the ecological or the anthropological and the cultural perspectives – which is, of course, not a dichotomy in reality – it primarily focuses on the material perspective. All chapters, therefore, explore the role material culture plays in constituting the network we call the Mediterranean. It is here that the two key concepts of this volume – globalization and archaeology – can meet in a fruitful manner. Indeed, as Broodbank has observed, 'Mediterranean artefacts are everywhere' (2013: 26).

Globalization is about putting connectivity and its implications (Chartier 2001; Pitts and Versluys 2015) at the centre of historical analysis. It is, therefore, about focusing on both the local and the global aspects of an object, context or problem simultaneously and as a matter of fact. This is important for the Mediterranean and Mediterranean history, I think, on two different levels. First because it makes us study the Mediterranean in terms of connected histories (Subrahmanyam 1997). Second, because it makes us aware of the connectedness of the Mediterranean on a global scale (Beaujard 2010; Horden and Kinoshita 2014 Part VII). Also the connectivity of the Mediterranean itself consists of both local (Mediterranean) and global (worldwide) aspects.

Archaeology is about objects and their impact or agency as part of the human–thing entanglement that makes up history (Hicks 2010; Versluys 2014). Objects are of great importance to Mediterranean history because, as we increasingly discover, the Mediterranean seems to have been made up by material connections in the first place (Van Dommelen and Knapp 2010). Museums all across the world not only testify to this fact, but they also illustrate the enduring agency of these objects for following generations. Mediterranean artefacts are everywhere – now and then. And isn't it mainly through the time-depth and the cultural memory that these objects provide and overwhelm us with that we are able to contemplate Mediterranean history in the first place (Miller 2015)? Not without reason, probably, was Braudel's last, posthumously, published book entitled *Les mémoires de la Mediterranée*.

Combining globalization and archaeology in our understanding of the Mediterranean, therefore, should not only make clear that its history revolves around the circulation of peoples, goods and ideas. It should also, and perhaps primarily, show that people, objects and concepts are not as intimately linked as we often imagine them to be: they travel independently from one another, with different speeds and rhythms and with different properties and lifespans (Versluys this volume). A material-cultural history of the Mediterranean is therefore not about people sailing the wine-dark sea and bringing their ideas and things with them in their boats. It is about how the configurations that we call Mediterranean society and history are made up from the interaction between humans and things, with an important role for the ideas and mentalities that accompany both – and that are not necessarily congruent at all (Osborne 2007). These interactions are concerned with two levels of connectivity: within the Mediterranean itself and towards other 'continents' like Asia, Africa and Europe. It is this less anthropocentric perspective that the section aims to open up.

The nature and intensity of these punctuations of connectivity differ over time and can be studied in relation to one another. Instead of the Mediterranean or Mediterraneanism, this section thus aims to develop the notion (if you will) of Mediterraneanizations (Morris 2005; Hodos 2014). Phrased differently: this section is not primarily about history *in* the Mediterranean (a traditional way of history writing focusing on the *who*); it is also not so much about providing a history *of* the Mediterranean (with related *why* questions about the ecological or social existence of distinct Mediterranean properties) – it is history writing *through* the Mediterranean, understanding it as a particularly connected space (globalization), and above all in terms of material agency (archaeology) and thus focusing on the *how*. There might or might not be a distinct Mediterranean culture; but there certainly is something that we might call a Mediterranean material-culture (Hicks 2010; Maran and Stockhammer 2012).

To enable the reader to compare these various forms of human–thing entangled connectivity, or Mediterraneanizations, in relation to one another and over a large period of time, it was decided to compile a long-term overview in six chapters, going from the second millennium BCE to the eighteenth-century Enlightenment Mediterranean. In each of the chapters, objects are the main protagonists, although the various authors do not deal with them in the same way. Objects are primarily studied by archaeology, art history and anthropology, amongst other fields. But often those disciplines seem to perceive the question of material agency rather differently (Gerritsen and Riello 2015; Van Eck *et al.* 2015). It is on purpose, therefore, that this section shows an eclectic variety of approaches towards the question of how to understand objects in motion; archaeologists can learn much from current developments within art history and anthropology.

Sue Sherratt focuses on the interweaving worlds of the Bronze Age Mediterranean. Understanding globalization as a progressive linkage and integration of pre-existing local and regional circuits of interaction and exchange which can be traced as far back as the third millennium BCE, she describes how, for the Bronze and Iron Age, we can study the emergence of truly new lifestyles resulting from human–thing entangled connectivity. As with present-day globalization, she argues that (p.603):

> the driving motor was desire for material possessions well beyond the necessities for simple subsistence, including ones which would bring novelty or would distinguish their owners from others around them [resulting in] the invention and propagation of new products and technologies which nobody previously knew they needed.

Peter van Dommelen shows how during the first millennium BCE these direct, Mediterranean-wide contacts develop into the establishment of permanent and culturally distinct settlements in distant regions. Where in the old days this was seen as 'Greek colonization', we now know that the Phoenicians were probably earlier and at least as important. This was a Mediterranean-wide phenomenon involving many players and circling around objects. Filling in globalization through the concepts of colonization, networks and connectivity, van Dommelen describes the major convergent developments in the Archaic, Classical and Hellenistic Mediterranean. Throughout his chapter he rightly points out that it is crucial 'to unpack the nodes where the connections were made (–) in order to understand how connections were created and managed' (626). Indeed we will never understand the global Mediterranean without a focus on the local.

Robert Witcher (p.634) discusses the Roman empire in, roughly, the first part of the first millennium CE. For many scholars, the *Imperium sine fine* probably is the base-line in terms of ancient globalizations:

> For if an empire spanning parts of Europe, Africa and Asia and characterized by the mass production, exchange and consumption of a shared material culture does not qualify as a form of globalization, then it is improbable that any other pre-industrial example qualifies either.

The issue, as Witcher rightly underlines, is thus not so much whether the Roman world was globalized, but rather how to conceptualize and measure that globalization. A series of vignettes draws attention to the richness of the archaeological evidence on which studies of human–thing entangled connectivity in the Roman world can proceed. These also show, moreover, how globalization in the Roman world had an impact on people through shifting repertoires of material culture.

Petra Sijpesteijn deals with the following millennium (600–1600 CE) and focuses on new cultural constellations emerging through Mediterranean dynamics. These include the mid-seventh-century Arab conquests and the formation of an integrated Muslim empire in the following centuries. In the development of a global commercial network extending from the Mediterranean into the Indian Ocean via the Red Sea as well as with the arrival of 'the Turks' (that is both the Mamluk system and the establishment of Ottoman rule around the Mediterranean), objects have an important role to play.

Marta Ajmar's contribution on the 'long Renaissance' shifts the analysis from archaeological perspectives towards art history. She focuses on how objects not only document but rather constitute global connections: 'crossing regional boundaries within the Mediterranean in continuous processes of cumulative innovation and creative emulation, ultimately providing evidence for broad long-term connections between different regions in Europe, Africa and Asia' (p.669). She analyses two of these cross-cultural crafts through a distinctly material-cultural approach that she coins 'material mimesis'. She argues that: 'an art engages in the cognitive imitation of another *materially and technologically*, bringing to light knowledge exchange and cross-cultural interconnectedness in the *longue durée*' (p.669). Material mimesis is how we can study past globalizations through objects.

Christopher Drew Armstrong takes us into the eighteenth century, in which the Mediterranean was a distinctly French Mediterranean. He shows how a trade system of circulating objects was set up and maintained, and how, through things and ideas as much as people, the Mediterranean became French. Highlighting important instruments of globalization like knowledge accumulation, his analysis links up with what Bruno Latour described as 'centres of calculation'. Indeed, these centres were important nodes through which connections were made. This chapter underlines the point that objects from the Mediterranean past play an equally important role with constituting that French Mediterranean, an important topic now also explored by Peter N. Miller's wonderful book (2015) on Peiresc's Mediterranean world. When Mediterranean artefacts are everywhere, so it seems, it is impossible to ignore them.

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7.2

A globalizing Bronze and Iron Age Mediterranean

Susan Sherratt

Introduction

The term 'globalization' was invented in the 1980s, and, as the *Oxford English dictionary* makes clear, it is usually thought of as a characteristic of a world economy that has only recently come into existence (Feinman this volume; Jennings this volume), in which the exigencies of free-market capitalism demand (and achieve) the free movement of goods and capital across national and cultural boundaries, in which sense it conveys a particular modern ideology. Small wonder, then, that archaeologists and economic historians have hesitated to introduce the term into their characterizations of the ancient world, fearful of the political blow-back and of the kind of reaction which greeted the adoption and adaptation (for much earlier periods) of some of the concepts and terminology of Immanuel Wallerstein's closely related Early Modern 'world-system' (Wallerstein 1974; see Feinman this volume) from the late 1970s onwards. Yet, if one ignores the modern politics (Robertson this volume), then Anthony Giddens' (1990: 64) definition of globalization as 'the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa' seems to describe, at least in outline, the results of the kinds of processes one can trace unfolding in the Mediterranean during the Bronze and Iron Ages. This is the increasing linking-up and integration of wider and wider areas of the Old World, including the Mediterranean, primarily in an economic sense (or at least for the most part, once it got going, driven by economic motors), but, as a direct consequence of this, in a cultural sense, through the widespread adoption of closely related values and ideas over an increasing number of regions. This is what I aim to describe briefly in this chapter.

As far, at least, as the Mediterranean is concerned, the process is based at its simplest on the progressive linkage and integration of pre-existing local and regional circuits of interaction and exchange, which can be traced at least as far back as the third millennium BCE, but the traces of which have tended to be interpreted in different ways over the years. Once upon a time it was widely believed that cultural traits were both particular to individual cultural groups and constant and that technologies and 'styles' could only be invented once and in one place, so that innovations in one cultural area had to have arrived from some other cultural area by means of processes such as colonization, invasion, migration or vaguely defined long-distance trade, or by the even more vaguely defined process of 'diffusion'. Starting in the late 1960s, however, under the influence of the application of the ideas of 'new (or processual) archaeology' to the prehistoric Mediterranean, there was a reaction against such views because of a fundamental paradigm shift, in which visions of migrations, colonizations and diffusion of technological empowerment from the orient, based partly on the specificity of archaeological cultures as surrogates for the uniqueness of distinct peoples and partly on the developmental primacy of technological innovation, were replaced by ones of indigenous development with emphases on regional evolution and autonomy. Within a decade or two, paradigms were to shift again, and contacts previously denied were re-established, accompanied by a variety of attempts to accommodate them within explanatory frameworks which ranged from linkage systems of varying directness and complexity (and, in some cases, vagueness) to ones which came close to replicating those of fifty years ago. As has often been pointed out (Versluys this volume), such paradigm shifts are often less to do with major advances in archaeological discovery than with changes in general intellectual currents brought about by contemporary political, economic and social preoccupations.

Major shifts in paradigm fashions apart, however, there is much in the textual and archaeological record, and even more clearly in the course of long-term Mediterranean history generally, from at least the later third millennium BCE onwards, to suggest the gradual and steady development of something that might be called systemic structural interaction, and consequently of increasing 'globalization' which, in its broadest and most apolitical sense (see e.g. Giddens 1990), seems to me to be virtually interchangeable with it (Wilkinson 2014: 25–26). In many ways, this is as much a raising of perspective as a fundamental paradigm reversal. It depends on a willingness, after the enforced geographical parochialism of previous decades (driven to a large extent by reactions against colonialism, but reinforced by a tendency to ever-increasing specialization), once more to identify large-scale, in this case systemic, intra-regional patterns overlying the myriad of small-scale, local or regional patterns which were likewise an integral part of the complex tapestry of past human activity and interaction. It also requires an acknowledgement, largely precluded by an adherence to ideas of stadial socio-cultural evolution or by Marxist or other utopian views of the distant past, that past societies were not necessarily as simple or 'primitive' as we might like to believe. Instead, we should recognize that many of them were actually much more culturally and socio-economically sophisticated (and increasingly interconnected in complex ways over surprisingly long distances) than we have tended to credit them as being, and that many of the aspirations, practices and strategies characteristic of 'capitalism' were displayed and deployed long before its supposed historical beginnings in Early Modern Europe. This is not a question of taking sides in any modern political debate. It is merely a recognition of the larger historical patterns of structural interaction, which can be traced over many centuries in the archaeology and texts of the western Old World, including the Mediterranean, and which are associated particularly with the contagion of urbanization in its broadest sense.

The effects of 'globalization' in the Bronze and Iron Age Mediterranean, certainly, did not take the extreme form in which we experience them today. Nevertheless, many of the basic underlying motives and processes, if not the scale and the particular technologies available, were similar. As in our modern globalization, the driving motor was desire for material possessions well beyond the necessities for simple subsistence, including ones which would bring novelty or would distinguish their owners from others around them, or which would simply make life more comfortable or pleasant; and a corollary to this was the invention and propagation of new products and technologies which nobody previously knew they needed.

The later third millennium

It is worth remembering that increasingly direct linkage, in almost all cases, was built on pre-existing circuits of exchange and interaction, either overland (as in the case of much of West Asia) or by sea (in the case of the Mediterranean). Already around the middle of the third millennium on the north-eastern edge of the Mediterranean we can see the somewhat spectacular results of indirect long-distance linkage through such contiguous or overlapping circuits in the conjunction in Troy 'Treasure L' of beads of Baltic amber (which probably reached north-west Anatolia via the Danube) and an axe-hammer made of lapis lazuli from Badakhshan in north-east Afghanistan (Antonova *et al.* 1996: 152, 175, 211) (Figures 7.2.1 and 7.2.2). We can probably see the first stirrings of a gradually more integrated linkage in the eastern half of the Mediterranean during the same millennium, when it looks as though silver from Aegean sources began to be exploited with at least part of an eye to a demand further east. This is supported from the middle of the millennium by a series of Aegeo-Anatolian balance weights which interrelate with wider west Asian metrological systems (Rahmstorf 2011: 110–11), and which were almost certainly used primarily for weighing metals. The later third millennium also saw the development of what Vasif Şahoğlu (2005) has termed the 'Anatolian trade network', which extended from eastern Anatolia and Mesopotamia in the east to the Saronic Gulf in the west, including Cyprus to the south, but which also had further more diffuse links to the Corinthian Gulf and the Adriatic and central Mediterranean further to the west (Maran 2007), and which seems to have existed primarily as a function of long-distance flows of metals, including silver. However, while the western end of this network was focused mainly on the central and northern Aegean, in the southern Aegean the first direct links between Crete and the Levant towards the end of the third millennium, perhaps initiated by Byblos (and visible, for example, at Mochlos in northeastern Crete: e.g. Branigan 1991), may have been motivated mainly by the acquisition, through the funnel of Crete, of silver from more northerly Aegean sources. Certainly, by the time of the First Cretan Palaces in the earlier second millennium, Crete, like the Mesopotamian and Syrian centres before it, had developed the manufacture of fancy woven woollen textiles for export, probably accompanying finished silver vessels like those from the Tôd Treasure from the Temple of Sesostris near Luxor (Pierrat-Bonnefois n.d.), and destined especially perhaps for Egypt, where painted versions of canopies with patterns reflecting those of contemporary Aegean pottery were already found on the ceilings of Twelfth Dynasty tombs (Barber 1991: 339, 345–47).

Innovations in marine transport technology undoubtedly played an important part in the process of increasing direct linkage of the Mediterranean. The first of these, probably in the later part of the third millennium BCE, was the introduction into the Aegean of the oared sailing ship (Knappett this volume), which almost certainly enabled a direct link between the Levantine coast and Crete. Ships which could take advantage of a sail, even if only clumsily before a following wind, could travel further faster and carry more cargo, and provided more room for the necessary rowers than the narrow (and slower) paddled longboats that preceded them. The adoption of oared sailing ships in the Aegean would have transformed circulation patterns, in particular by making it easier to travel from Crete directly northwards into the Cycladic islands and on to the Saronic or Argolic Gulfs, instead of going round via Kasos and Karpathos and the Anatolian coast (Broodbank 2000: 346), thus enhancing Crete's position as a gateway between the eastern Mediterranean and the rest of the Aegean. Further advances in technology came significantly later, with the introduction of the brailed rig on the Levantine coast in the Eighteenth or Nineteenth Dynasty, and its development and spread to the Aegean around the end of the

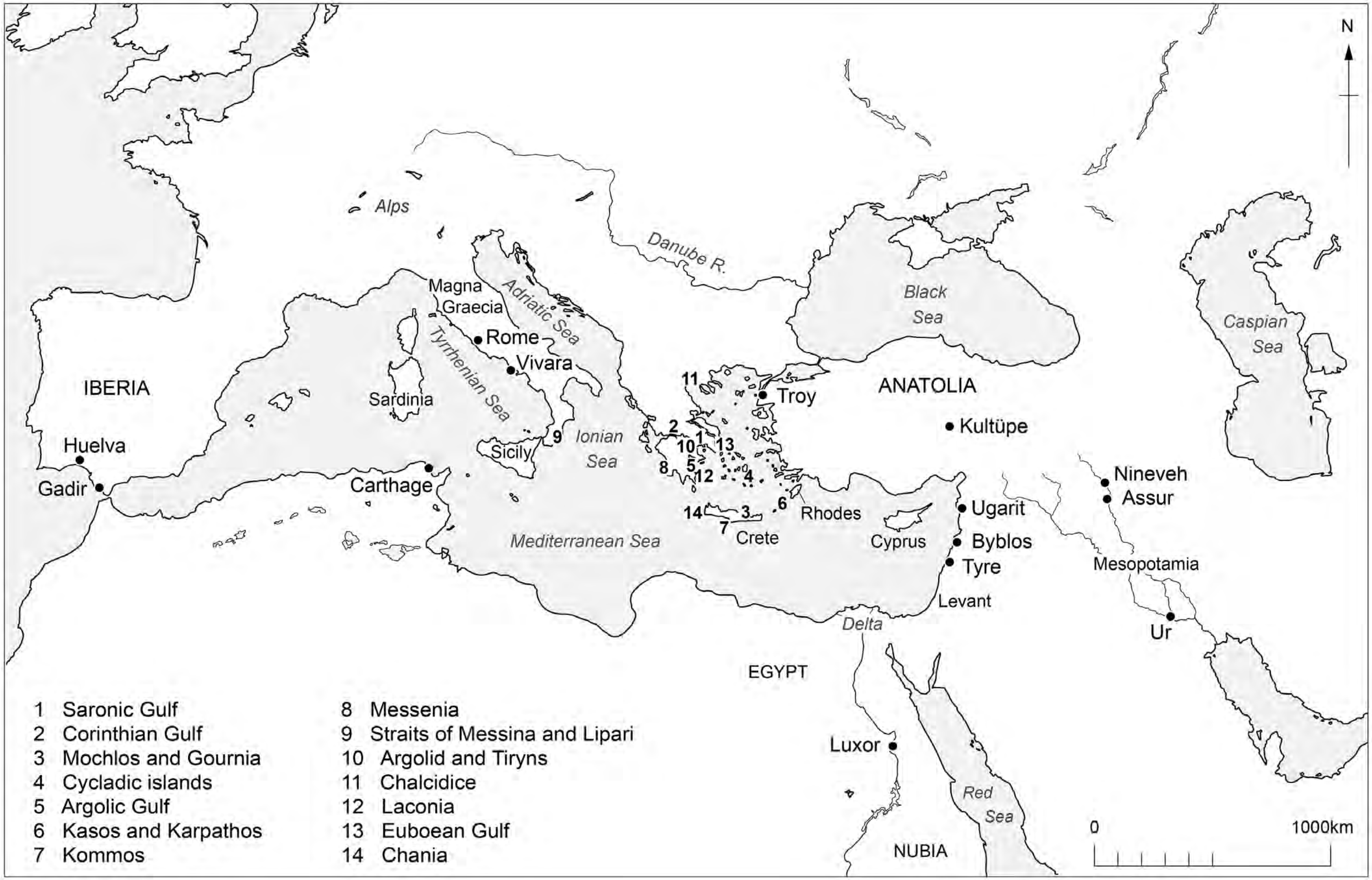

Figure 7.2.1 Map showing places mentioned in the text

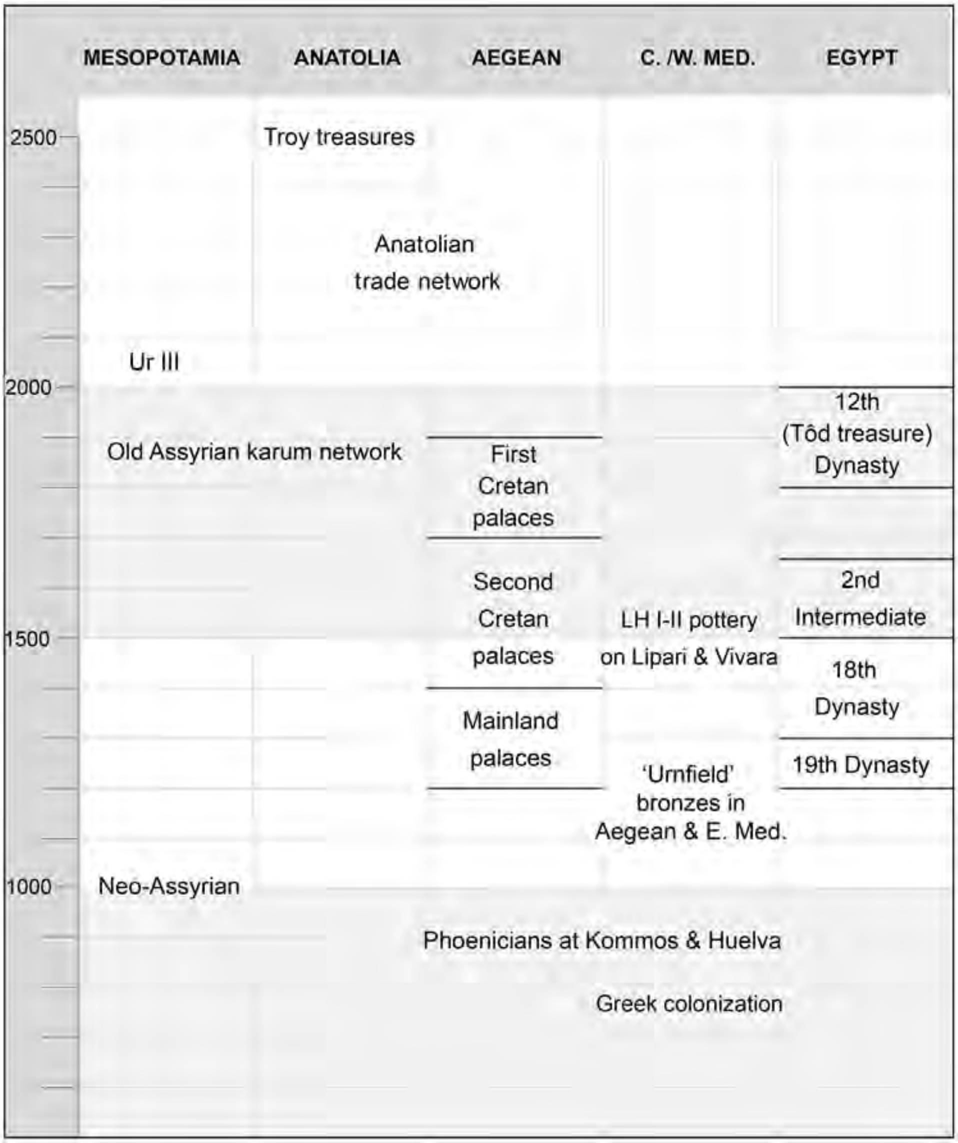

Figure 7.2.2 Chronological outline

Bronze Age (Emanuel 2014). This made ships much more easily manoeuvrable, and so more efficient at both escaping and actively engaging hostile craft. It was followed, in the Early Iron Age, by the development of a clearer distinction between trading (cargo) vessels and dedicated warships, particularly on the part of Phoenician ships, as illustrated, for example, in seventh-century Assyrian reliefs from Nineveh (e.g. Moorey 1975: 69). This was a distinction which also became apparent in Greek ships at around the same time – a distinction which appears to illustrate the kinds of conflicts that must have proliferated as seaborne trade and interaction in the western half of the Mediterranean led to more and more individual and group competition.

The early second millennium

The early second millennium saw two developments which are either crucial for, or have a bearing – though perhaps less direct – on, the further integration of the eastern Mediterranean. The latter was the Old Assyrian karum network, run by merchant guilds from Assur in northern Mesopotamia, which we know about almost entirely from the texts they left behind at its centre at Kültepe-Kaniš in central Anatolia (see also Mac Sweeney this volume). What these texts make clear is that this network of merchant colonies, which extended outwards to the north and west of Kültepe (Garelli 1963; Larsen 1987), was chiefly concerned with the acquisition of silver, much of which was transported back to Assur, while in return they imported a variety of elaborate forms of textile made in large-scale Mesopotamian factories, like those described earlier in some of the earlier Ur III documents (Wilkinson 2014: 228–30), and tin – the latter presented as coming from far to the east of Assur (Veenhof 1997: 339–40). This successor to the late third millennium 'Anatolian trade network', which also introduced writing to central Anatolia, was thus probably more focused, concentrated and directional than its predecessor, and almost certainly more complex in its mechanisms and strategies. To the extent that it may have impinged westwards towards the Aegean coasts of the Mediterranean, this would have been because silver from Aegean coastal sources (particularly perhaps northwest Anatolia) were likely to have been drawn into its network.

In the southern part of the Aegean at the time of the First Cretan Palaces we can see a separate system operating. As already mentioned, Aegean (probably Cretan) woven woollen textiles appear to have reached Egypt (where wool was not used) from the beginning of the nineteenth century BCE, when they were almost certainly accompanied by silver from the western and central Aegean and by ready-made silver goods, like the silver kantharos from Gournia on Crete (Evans 1921: 191–93 and fig. 139a) and probably at least some of the contents of the Tôd Treasure. They were also accompanied by small quantities of Cretan polychrome pottery, some of which replicates international metal shapes and most of which, significantly perhaps, echoes inlaid metalwork or textile patterns in its polychrome decoration. While not in itself a valuable elite class of object, this pottery had the advantage of providing less-than-elite recipients in the East Mediterranean with exotic and prettily decorated drinking and pouring vessels, which echoed some of the more highly prized goods which many of them, perhaps, did not have access to; of providing the carriers with a means of making some personal profit on the side; and of providing at least part of the Cretan population a means of extracting some added value from the flow of high-value raw material channelled through the island. Within the Aegean itself, areas of particular Cretan interest can be traced through the distribution of this pottery (Knappett this volume), much of which can be said to lie close to, or on the routes to, a variety of resources, including silver. In the East Mediterranean, decreasing (though always very small) numbers of the same pottery can be found in the Levant and northern Cyprus respectively, as well as in Egypt, while at the same time very small amounts of, probably, Cypriot pottery turn up at Kommos on the southern coast of Crete, thus delineating an anti-clockwise route linking Crete, Egypt, the Levant and northern Cyprus and quite possibly coordinated by traders from Byblos or Ugarit.

There is a rationality in this growing pattern of trading linkages, which reveals them as something systemic and interrelated, even if not particularly intense or necessarily even very regular – though it should be remembered that if anything at all can be picked up in the archaeological record, it is likely to be the merest tip of a much larger iceberg. The eastern Mediterranean (including the Levant and Egypt) by this time could never have too much silver, and a great deal of the Anatolian silver was funnelled back to Assur and perhaps reached the northern Levant, so that the southern Levant and Egypt became more dependent on Aegean silver channelled to them through Crete. Similarly, large pieces of fancy multi-coloured woollen textiles (large enough to act as canopies), which could be woven on vertical looms, were seen as desirable and exotic by the wealthy in Egypt, where dyed wool and vertical looms were otherwise unknown. In exchange, Crete received Egyptian or Levantine ivory, precious or semi-precious stones and quite possibly Nubian gold, all of which could be used in the enhancement of political and social status by the Cretan elites responsible for organizing these exchanges. The different economic spheres involved both in the Old Assyrian karum network and in Cretan-Aegean-East Mediterranean interactions meant that what was particularly desired by one part of a system was often (at least initially) of less economic value to those at its source, thus allowing it to be acquired for minimal cost in terms of exchanges, and also allowing intermediaries the possibility of making some profit at various stages along the way. It also encouraged the establishment of new infrastructures for the acquisition or manufacture of goods for exchange, thus leading to points of no return when it became difficult to dismantle these without creating excessive local or regional social upheaval. And finally, as economic and cultural values reached parity throughout existing networks, it encouraged further ramifications of these networks in the quest to acquire newer (and cheaper) sources of raw materials such as silver, so increasing the numbers of people and regions with a stake in (if not dependence on) the system, as well as the potential for proliferating it as a whole and creating new controlling centres.

The mid-second millennium

In the middle of the second millennium, which coincides with the Second Intermediate period in Egypt and the Second Palace period on Crete, we can see just such a proliferation of networks. The Second Intermediate was one of those periodical episodes in ancient Egyptian history when the Delta broke away from the rest of Egypt and joined its natural geographical and economic environment in the East Mediterranean. This marked it as a time when maritime interaction in the East Mediterranean was particularly active, and when the demand for silver in this part of the world consequently increased, so that it is no coincidence that the intensity of interaction between the East Mediterranean and Crete rose in this period. The response to this was the development of increased interaction between Crete and those parts of the Greek mainland to the north-west, which themselves now developed maritime contacts with metal sources much further afield and whose elites came to local prominence on the back of funnelling flows of relatively cheap silver from much further away to Crete and ultimately to the east. In the southwest Peloponnese, Messenia, with its access to the Ionian Sea and southern Italy, began to link up with the Straits of Messina and the Tyrrhenian, where Late Helladic I–II (sixteenth–fifteenth century BCE) southern (including southwestern) Peloponnesian pottery is found on Lipari in the Aeolian islands and on the island of Vivara in the Bay of Naples (Vagnetti 1999), while Late Helladic II pottery from the Argolid in the north-east Peloponnese is found in the Chalcidice in the north Aegean (Cambitoglou and Papadopoulos 1993). At just this time, we begin to see socio-political developments in regions such as Messenia, Laconia and the Argolid, which are also marked by increasing signs of relationships with Crete. These regions (especially Messenia and the Argolid) were particularly well placed to take advantage of maritime route systems to the west and north, and it seems quite likely that they were now funnelling materials like silver from the west and north southward and eventually eastward by means of their own newly developed contacts with the Tyrrhenians (in the case of Messenia) and the northern Aegean (in the case of the Argolid) (Broodbank 2013: 432–41). These developments, which had the effect of establishing the nodal positions of certain sites and regions on route networks along which materials in particular demand flowed, eventually resulted, from around 1400 BCE, in the development of the Greek mainland palaces (Figure 7.2.3).

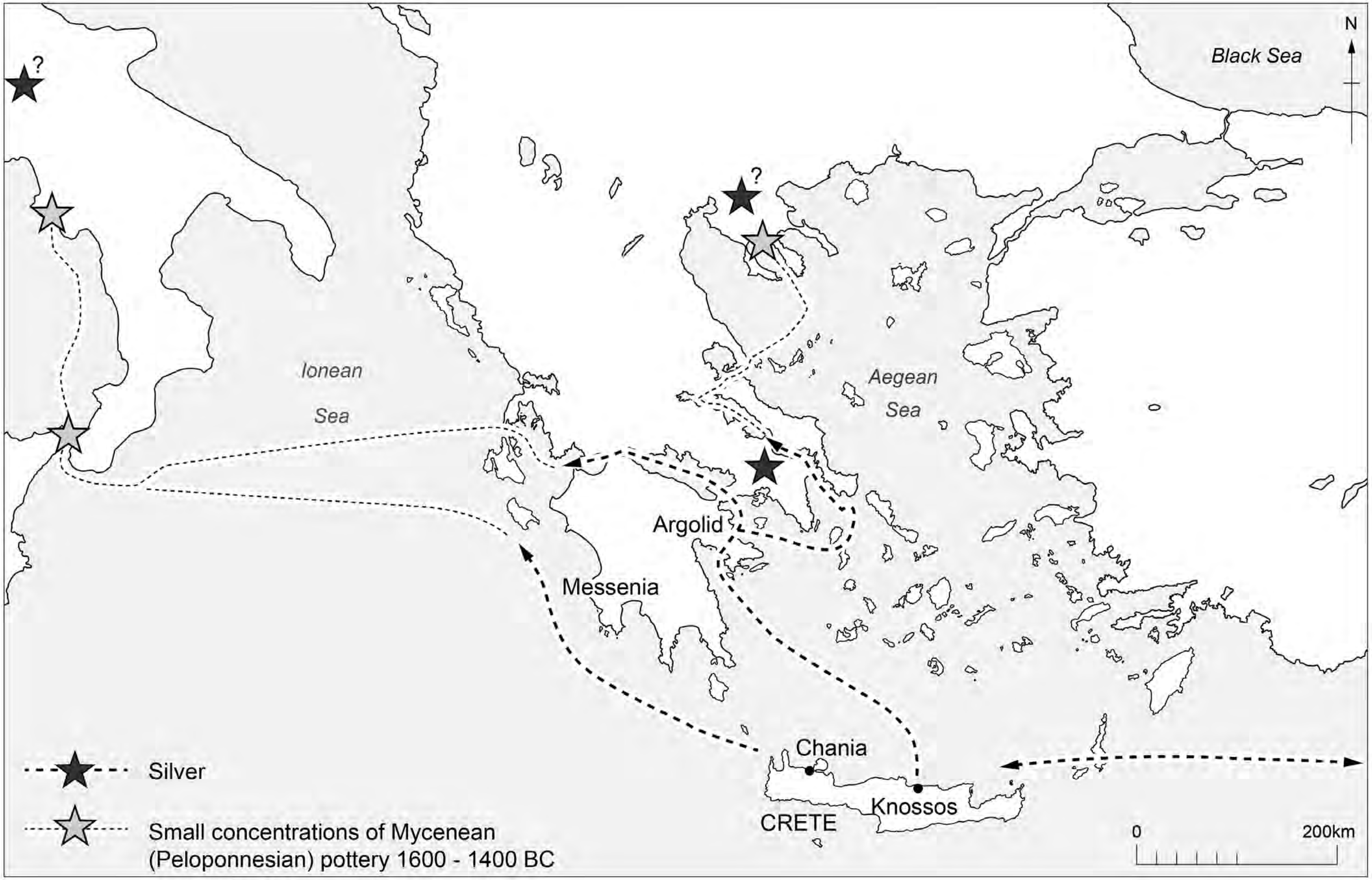

Figure 7.2.3 Mid-second millennium expansion of the system in the Aegean. The start of a sequence of developments which ends by binding certain Greek mainland regions more closely into the culture and economy of Crete and the East Mediterranean, and which results, from around 1400 BCE, in the development of the mainland Mycenaean palaces

The fourteenth and thirteenth centuries saw increasing interaction on the part of various Aegean regions and centres, with both the eastern and central Mediterranean, in which increasing volumes and varieties of exchanged goods and materials were involved (Knappett this volume). While a number of these goods and materials are hard to detect archaeologically, pottery allows us to trace, at least partially, some of the route networks along which they travelled. Pottery made in the Argolid (and, interestingly, apparently aimed specifically at an eastern market) reached Cyprus and the Levant in impressive quantities, while much of the Aegean pottery that arrived in the central Mediterranean seems to have originated in Crete. As before, this can probably be put down to routes along which small quantities of particularly highly valued materials flowed. The Argolid's position, on an isthmus linking the southern Aegean with the north and west via the Corinthian, Saronic and Euboean Gulfs, allowed it to channel high-value materials from the western or north-west Aegean and perhaps also from the central Mediterranean, while excavations at Kommos in southern Crete have suggested that, in this period, just as again in the Early Iron Age, this coastal site acted as an interface for ships travelling to and from both east and west (Shaw 2006). High-value raw materials (which mostly we cannot detect in the archaeological record) were supplemented by manufactured objects, such as finished metalwork and, particularly, elaborate varieties of textiles and processed (perfumed) oils, the infrastructure for which is evident from Aegean palatial documents (Killen 1984; Shelmerdine 1985). While the system was in itself rational, there was not necessarily any face-value rationality in what was carried where, any more than there is in our modern globalized commercial systems. Examples of 'coals to Newcastle' are not hard to find, and much depended on the inter-cultural allure of branding (Bevan 2010). However, at least in the earlier part of the period, one senses attempts on the part of East Mediterranean political authorities with their varying degrees of command economies to exert some notional control over the bulk circulation and distribution of the most important and 'powerful' materials, such as metals.

During this period, Cyprus emerges as a very effective 'middleman' island. Strategically placed in the East Mediterranean, with a long history of involvement in seafaring, free of control from dominant eastern powers such as Hittites or Egyptians, but with a history (since at least the early second millennium) of providing copper for West Asia, it appears to have been responsible for much of the carriage of Aegean pottery and its contents (as well as probably textiles and other goods and materials) to the east, picking these up at entrepôt points such as Rhodes and Kommos on Crete, and distributing them, along with its own goods, in the Levant (Broodbank 2013: 411). Cypriot activity also became evident in the central Mediterranean, particularly on Sicily and Sardinia – a trend that intensified towards the end of the thirteenth century (Vagnetti and Lo Schiavo 1989). During the thirteenth century, we see 'import substitution' of Aegean-type pottery (and probably the 'faked' contents of some of this) on Cyprus, followed by the end of the century in the Levant (S. Sherratt 2003: 45). At the same time, Cypriot coastal centres diversified further into more valuable materials – producing more in the way of finished metal objects, which can be traced both in the eastern Mediterranean and further west, and increasing their production of olive oil and textiles to industrial proportions. Similar kinds of import substitution and increase in manufacturing capacity of similar ranges of goods can be seen in the central Mediterranean, for example in southern Italy and Sicily, where Aegean-looking pottery, olive oil and probably textile production and indirect tracers of the use of silver (at least for drinking vessels) can all be glimpsed (Vagnetti 1993: 147–51).

Later second millennium/early first millennium

By the end of the thirteenth and in the twelfth century, we reach something that it is not unreasonable to call an early manifestation of Mediterranean globalization, by analogy with our own modern globalization – something which by this time covers the entire eastern half of the Mediterranean, with ramifications further north and west which will provide the basis for even more direct and integrated linkages in the centuries to come (cf. S. Sherratt 2003). Evidence of Cypriot (probably small-scale independent) traders is seen not only in the western Aegean (for example, at Tiryns, in the Saronic Gulf, on the route via the Euboean Gulfs to the northern Aegean, and at Chania in western Crete) and in southern Italy, Sicily and Sardinia, but also right up to the head of the Adriatic, where it seems possible that an East Mediterranean shekel unit was introduced from around 1200 BCE (Pare 1999). Again, the main motive for venturing so far seems to have been chiefly metals – though other materials, such as exotic amber, were certainly involved. This was a time when the output of bronzes in various bronze-producing regions in an arc around the Mediterranean appears to have increased exponentially (A. Sherratt 1993: fig. 10), and it appears that Cypriot maritime traders took advantage particularly of ready made bronze objects produced around the Alps and in northern Italy, of types with potential to appeal to aspirant elements of society further east, to trade these informally in a decentralized manner. These 'Urnfield' bronze types, which included weapons, such as Naue II swords and Peschiera daggers, and personal ornaments, such as showily curved knives and fibulae (the world's first safety pins), began to reach the eastern Mediterranean in the later thirteenth century and their appeal is demonstrated by the fact that these types thereafter quickly became 'naturalized' in both regions and were among the first types to be translated into iron, which throughout the second millennium in the east and the Aegean was regarded as the most precious material of all.

It is at this point that we come to various phenomena that have even stronger analogies in the sometimes subversive way our modern globalized world seems to operate. The net increase in the amount of bronze in circulation in the eastern half of the Mediterranean as a result of input from new circum-Alpine sources and of the increasing recycling of bronze and other metals from looted tombs in the eastern Mediterranean, the relatively decentralized manner in which it appears to have been traded around the proliferating maritime networks, and the indications that bronze was also now being traded in the form of recycled ready alloyed scrap, probably at a wide variety of social levels, meant not only that any centralized control over its circulation or distribution was now lost but also that it inevitably lost some of its relative exchange value despite it remaining a practical necessity for things like agricultural tools and weapons. This had several effects. One of these was that any previous control over the circulation of bronze (and other metals) was lost, thus creating politico-economic difficulties for some powers with centralizing aspirations, and in some cases simply bypassing established nodal centres on earlier long-distance route networks. Another was that Cyprus (in particular) began regularly to produce iron in the form of 'prestige' objects like knives, daggers and subsequently swords and spearheads, which were also of practical use, thus instigating the beginnings of a Mediterranean Iron Age. Yet another was an increase in the volume and velocity of multi-directional flows of metals within the Mediterranean (and by now probably also including the Black Sea), interacting with similar interconnected flows in temperate and Atlantic Europe, so that silver from Sardinia reached the Levant and Cyprus, Cypriot copper reached Sardinia (where Cypriot metallurgical tools were introduced in this period), and mixtures of artefact types originating in a very wide range of regions (and sometimes of different dates), often composed of metals from a variety of different sources, appeared in hoards and other contexts all over the Mediterranean (Knapp 2000). In the tenth century, around the time of the first evidence of Phoenician activity in south-western Iberia, the Huelva hoard, which may or may not have been the result of a shipwreck (Mederos Martín 2006: 168), contained a wonderful mixture of Atlantic (including northern Atlantic) swords and spearheads, proto-carp's tongue swords of probable Iberian manufacture and elbow fibulae of East Mediterranean and Sicilian types. This all seems a little reminiscent of the current fall in world prices for oil (which in many respects had a role equivalent to bronze in the Mediterranean Bronze Age), brought about by fracking of shale gas in the United States, the desire of Gulf rulers to maintain good relationships with the West, and (somewhat counter-intuitively) by the hostile appropriation of oil wells and resulting widespread entrepreneurial smuggling in the Middle East: it is a chaotic situation, certainly good news for some, but arguably less good for others, and nobody knows what shifts in international relationships it will lead to.

Throughout all this, the need for silver in the east, primarily by now as a medium of payment in even quite small transactions – and still much in demand by Assyrian and other rulers as a material for display as well as for the accumulation of capital – never faltered. A number of hack-silver hoards in both Cyprus and the Levant, datable to between the twelfth and seventh centuries BCE and consisting of small weighted units of silver, which can be regarded as coinage *avant la lettre*, provide evidence, if nothing else, of its ubiquitous use for these purposes in these regions (Thompson 2003). Some of this silver appears to be of central (Sardinian) and possibly West Mediterranean origin (Thompson and Skaggs 2013), and it seems more than likely that it reached the east as a result, towards the beginning of this period, of Cypriot links with Sardinia, itself increasingly linked in a metalworking koine with both Sicily and Iberia and the Atlantic zone (Lo Schiavo 2008). From the later eleventh century, however, the Phoenician cities (especially perhaps Tyre) established close economic ties with Cyprus, and from then on there are increasing indications of Tyrian activity westwards: in the Aegean from the second half of the eleventh century (not least on the sea route running west of Euboea, which linked Attic and north-west Aegean silver sources), on Crete (where Phoenician transport amphorae reach Kommos on the route to the far west by the end of the tenth century (Shaw 2006: 43)), and – more or less simultaneously – in the far southwest of the Iberian peninsula, with its rich resources of silver.

We have now reached the point when the entire Mediterranean was directly linked up by Phoenician maritime entrepreneurs traversing from far east and far west and back again, whose initial motive for travelling so long and far was undeniably the search for silver, which could be acquired in an Iberian context for the kind of minimal cost that offset the expense and dangers of the voyage. These cut through the separate maritime circuits of exchange in the West Mediterranean, and moreover tapped into existing Atlantic circuits (Henderson 2007: 74–75). What we recognize as Phoenician or Greek 'colonies' in the west and central Mediterranean (Hodos 2006: 19–22) were inaugurated in the first place to protect maritime routes on the way to and from metal resources, to defend and supply shipping and/or provide safe stopping places or places of convergence where they could interface with local networks through which they obtained the materials desired further east. In an environment of unprecedentedly multiple commercial competition (Phoenician city versus Phoenician city, Greek city versus Greek city, and – ultimately – collective Greeks versus Phoenicians as a collectively perceived 'other'), there was an impulse behind their establishment as 'colonies' to make overtly political 'statements', usually considerably after the routes had come into use: to lay claim to those particular spots as the 'possessions' of one home city or another, and to mark this visibly, particularly by the establishment of temples. Religious syncretism was used (particularly perhaps by Phoenicians, whose deities already had a long history of merging effortlessly with those of their varied neighbours) as cultural wallpaper or a harmonizing factor to create something approaching a pan-Mediterranean cosmogony, so that in the seventh and later centuries characters like Melqart/Herakles or Astarte/Tanit/Aphrodite, interchangeable with any number of local gods with whom they were identified, were worshipped in various manners and under varying names all over the Mediterranean (Herodotus 1.105, 2.44; Malkin 2004: 350–51). Many of these colonies remained permanent, the Greek ones gradually cutting all but notional, ideological ties to their mother cities and the Phoenician ones physically cut off from their home cities after the Babylonian invasion at the end of the seventh century; they established themselves as polities (or even, in the long run, regional empires) in their own right, and developed specialized trading economies (such as grain in Sicily) based on expanded hinterlands.

Overview and conclusions

So, can we really talk about a 'globalized' Bronze Age or Iron Age Mediterranean? I believe that, at least, we can admit a 'globalizing' one, since several of the impulses and processes which have led to our modern 'globalized' world were already present or in train from at least the third millennium BCE (for a contrary view, see Jennings this volume). Put very simply, at their base was the desire for material acquisitions far and above the needs of everyday subsistence (Schneider 1977), above all materials and goods which conferred distinction: raw materials, such as silver and precious stones, on the one hand, which could be exchanged for advanced manufactured goods, such as woven textiles or glass, on the other. This was a type of exchange that carried an inbuilt, systemic trajectory towards growth in scale, complexity and geographical spread. As manufactured goods from an advanced manufacturing centre reached regions in which they were seen as status-enhancing novelties, they brought with them new 'lifestyle' values, which, once adopted, led to the adoption also of new technologies and the establishment of infrastructures to maintain such new lifestyles and to provide additional goods for exchange; and, as supplying regions cottoned on to the fact that the otherwise relatively 'useless' raw materials to which they had easy access were highly valued in regions which sought to acquire them, they adopted and progressively internalized the economic, socio-cultural and ideological values of the recipient regions with which they interacted. This led to an increasingly complex proliferation of networks, as highly desired raw materials were sought from further and further away, both by end recipients and middlemen, from regions which had not yet absorbed the economic or cultural values of the expanding system, and ultimately to the increasing intensification of economic, social and cultural exchanges and interaction over longer and longer distances. The opportunities for creating new networks and new nodal centres by bypassing or displacing old ones, as existing networks ramified and more regions and groups joined the game, led to periodic shifts in configuration which had the power, ever more momentously, to affect the lives and activities of people many miles away. The eastern half of the Mediterranean experienced this at the end of the Bronze Age, when overproduction of bronze in the circum-Alpine region encouraged increasingly diversifying independent (and politically and geographically interstitial) Cypriot and other maritime traders to bring more bronze goods into wider social circulation and to commoditize bronze further by dealing in bronze scrap. This not only undermined any aspirations to control bronze (and other metal) circulation on the part of established command-economy powers in the region (several of which collapsed around this time as a result), but precipitated a progression towards a full Iron Age, reached within a century or two of the end of the Bronze Age in the eastern Mediterranean; meanwhile, as metals from all sorts of sources flowed copiously in all directions throughout the Mediterranean, the demand for silver as a medium of exchange grew, and the East Mediterranean and Aegean were forced to go further and further to find supplies that were (at least temporarily) exchangeable for manufactured trinkets, like faience and glass and attractively packaged perfumed oils. It was this process which, in addition, finally spread technologies, such as sails and writing, throughout the length of the Mediterranean.

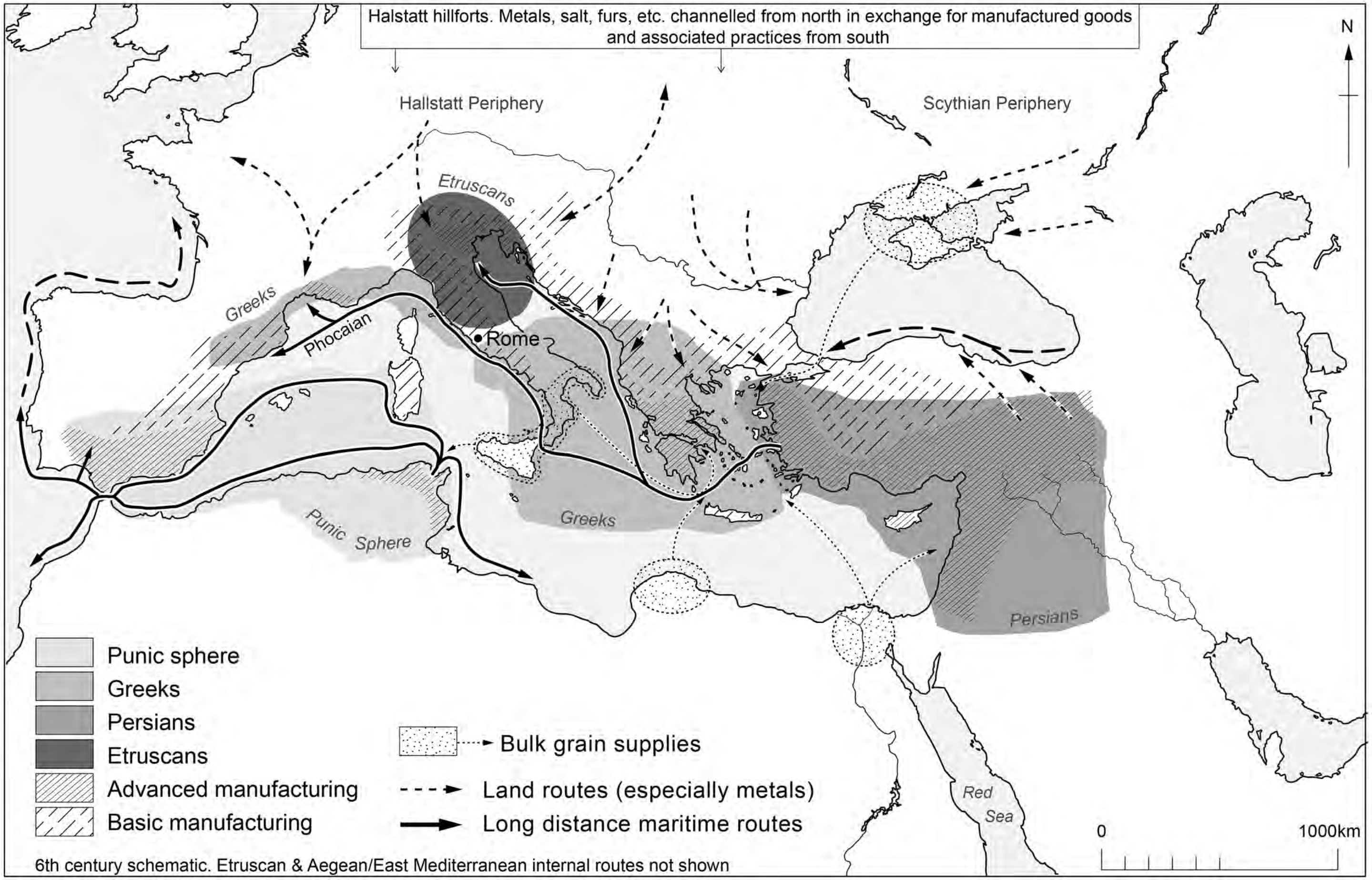
Halstatt hillforts. Metals, salt, furs, etc. channelled from north in exchange for manufactured goods and associated practices from south
N
Hallstatt Periphery
Scythian Periphery
Etruscans
Greeks
Phocaian
Rome
Greeks
Punic Sphere
Persians
Red Sea
Punic sphere
Greeks
Persians
Etruscans
Advanced manufacturing
Basic manufacturing
Bulk grain supplies
Land routes (especially metals)
Long distance maritime routes
0
1000km
6th century schematic. Etruscan & Aegean/East Mediterranean internal routes not shown

Figure 7.2.4 The configuration of a globalizing Mediterranean in the sixth century BCE. After Sherratt and Sherratt 1993, figure 1d

In the central and western Mediterranean, subsequent interstitial displacements can also be seen, particularly just beyond the limits of our period. Events far away in the Levant at the end of the seventh century cut off Tyre's western settlements and colonies from the East Mediterranean, opening the scope for Carthage to become the centre of what came to recognize itself as a Punic economic and cultural sphere (with Gadir as the centre of an expanding network outside the western edge of the Mediterranean (Aubet 2006)) and finally as a Carthaginian empire. Eventually, Carthage came into increasing economic and political competition with Rome, which itself had earlier risen to prominence in the later sixth and fifth centuries in an interstitial position, between the networks operated by an increasingly self-consciously defined Magna Graecia to the south and increasingly coherent Etruscans to the north, each with their own extended connections northwards into temperate Europe (Figure 7.2.4). By the time another interstitial group (the Macedonians) had created a vastly expanded and culturally increasingly homogeneous Hellenistic world from the end of the fourth century, the Mediterranean was undeniably "globalized', even if politically under the control of different dominant 'blocks'.

This may not be globalization in the sense that those in the twenty-firstst century might recognize – least of all the members of the anti-globalization movement, whose focus is above all on some of the less fortunate effects of hard-headed (and hard-hearted) global corporate capitalism, or the anti-capitalist 'occupy' camps, whose anger is directed primarily at the recent spectacular misdeeds and miscalculations of global financial institutions – but it fits pretty well with Jennings' (this volume) criteria for identifying globalization, and indeed with Giddens' (1990) more general definition of modern globalization, albeit on a smaller scale; and it already contained many of the motives and a number of the elements of what we might term capitalism (cf. Holton 2011). Desire for material possessions lay behind this incipient globalizing process, and what might be seen with hindsight as exploitation in objective terms was a driving force in its operation, though this has to be seen as relative from the point of view of those involved and could only last as long as it seemed to the advantage of agents on both sides. The difference is that, while our modern almost completely globalized world may have reached something approaching a zero-sum game where the most valued raw resources are concerned, and conflicts (sometimes on a truly global scale) have become inevitable, there was, three to five thousand years ago in the Mediterranean, always somewhere else to go and someone else to incorporate into the globalizing process – though even then the insecurities of competition on various fronts resulted in countless conflicts, recorded or otherwise. In the long run, however, the globalization of today grew out of, and has recognizable roots in, the material connections initiated, in the Mediterranean as elsewhere, several millennia ago.

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7.3

Classical connections and Mediterranean practices

Exploring connectivity and local interactions

Peter van Dommelen

Introduction

Classical Greece and Rome have all too often been hailed as the cradle of (at least) Western civilization, and have no less frequently been credited with many a 'first' in a very wide range of fields that runs from democracy and concrete to sewage works and drama. It would thus hardly seem far-fetched to highlight the Classical Mediterranean as a key moment in world history that saw globalization make a first appearance. Both the 'small Greek world' of Archaic to Classical-period colonial settlements and the Roman political-military unification of the regions surrounding the *mare nostrum* would seem obvious candidates for this role, if not as first appearances, then at least as critical moments in the deep history of globalization (Malkin 2011; Pitts and Versluys 2015).

As the Western preoccupation with its alleged Classical ancestry has come under increasing scrutiny in recent decades, however (e.g. Marchand 1996; Hingley 2001), it would nevertheless seem prudent to pause for thought and to reconsider claims about globalization as a Classical 'Graeco-Roman' phenomenon. One good reason for doing so is the widely assumed association of globalization with Western culture that it is as habitual as it is questionable to the point that it has been dubbed as 'westernization' (Nederveen Pieterse 2015: 67–72; see also Robertson this volume); at the very least, this should raise questions about Classical and Western biases in the perception and study of globalization.

At the same time, however, there is no smoke without fire, and there can be no doubt that the first millennium BCE was, broadly speaking, a period that saw the establishment of numerous Phoenician, Punic, Greek and even Etruscan commercial and agricultural settlements throughout the Mediterranean and indeed beyond. In Plato's famous words (*Phaedo* 109b), these establishments sat like 'frogs around the pond' of the Mediterranean and sustained long-distance networks spanning the length and breadth of the Mediterranean Sea. It is equally evident that increasing commercial, political and military interactions between traders and settlers on the one hand and local communities on the other led to more or less far-reaching cultural, social, economic and political transformations of all parties involved (Hodos 2006; van Dommelen 2012).

As a result, people on far-flung shores of the Mediterranean did not only become aware of each other but even developed connections of all sorts with each other, and became participants in a new *koine* that encompassed what eventually was to become *mare nostrum*.

How can we resolve this dilemma? Ian Morris has suggested a way forward with the notion of 'Mediterraneanization', which he explicitly defines in Mediterranean terms as opposed to a narrower Classical phenomenon (Morris 2003: 40). While his suggestion has been taken up widely, there has been rather less attention to the basic underlying questions that still remain to be answered, namely how these changes came about, what they meant locally to both outsiders and locals alike and whether and how these developments were related – regardless of whether the people involved were Greek, Roman, Phoenician, Iberian or Illyrian.

It is with these questions in mind that I intend to use this chapter to explore the broader task set by the editors of this volume, which is to assess whether and to what extent globalization may offer useful concepts or comparisons for understanding the period and region under discussion, i.e. the Mediterranean of Classical times. More specifically, the aim that I have set myself is to examine how and to what extent 'connectivity' intensified over the first half of the first millennium BCE. In doing so, I intend to look well beyond the Classical heartlands of Greece and Italy, and to pay particular attention to the roles played by other Mediterranean communities, some of whom, like Phoenicians and Etruscans, were evidently more mobile than others.

The starting-point for my discussion is provided by the notions of colonization, networks and connectivity. Rather than reviewing these terms in depth (for which see Knappett this volume), I will outline what I see as major convergent developments in the ways these terms have been used to discuss the Archaic and Classical Mediterranean, and take stock of where these discussions are leading to. Next, I will turn to networks and, more specifically, the nodes on which they hinge, and consider a number of significant 'key connectors' of the Archaic and Classical Mediterranean. Shifting emphasis from a colonial perspective to one centred on local interactions, I will argue how these cases suggest that thinking of 'colonial networks' does not even begin to do justice to their complexity. To conclude, I will discuss what the archaeological evidence can tell us about cultural interaction and change in the Mediterranean regions across the first millennium BCE.

Connecting terms: colonization, networks and globalization

Broadly defined, the period under discussion in this chapter covers most of the first millennium BCE, as it runs from the opening centuries of the millennium until the onset of the Hellenistic period by the third century BCE. While long-distance contacts have always existed since early prehistory, as is most powerfully demonstrated by the widespread distributions of obsidian in both the East and West Mediterranean throughout the Neolithic (e.g. Tykot 1996; Carter 2008), the centuries that encompass the Iron Age to Archaic periods (ninth–sixth BCE) were the first ones, in which not only direct Mediterranean-wide contacts were maintained, but people also established permanent and culturally distinct settlements in distant regions.

In conventional terms, these centuries are broadly captured under the heading of the Archaic and Classics periods writ large and defined as the 'age of colonization' (e.g. Graham 1982: 83). The study of Greek colonization has long constituted a cornerstone of Classical scholarship, because it underpinned the expansion of Greek and by extension Classical civilization throughout the Mediterranean; it also provided crucial evidence for the construction of an absolute chronology of the early Classical World (e.g. Dunbabin 1948; Boardman 1999; Purcell 2005). It is a measure of the strength of the Classical focus up to this day that other migration and colonial movements have only entered this picture of ancient colonization in recent years.

The recognition of Phoenician expansion as contemporary to, and indeed preceding, Greek colonization has probably transformed our understanding of Archaic connectivity most. Even if Classical authors like Homer (*Iliad* 23.740-44) and Thucydides (6.2.6) had already recognized the Phoenicians' maritime skills and early overseas exploits, and although Phoenician and Punic remains in North Africa and Sardinia had been recorded in the earlier twentieth century, it was only in the 1970s and 1980s that the first Phoenician settlements were systematically excavated in Andalusia (Spain), and found their way into broader debates about ancient colonization (Niemeyer 1990). Even at a major foundation like Gadir (GDR, or modern Cádiz), otherwise well known from literary references, substantial and tangible archaeological evidence has only been brought to light in the last few years as a result of salvage interventions (the so-called Teatro Cómico site: Botto 2015a; cf. Markoe 2000). Etruscan overseas ventures in the north-west Mediterranean have likewise only gradually come into focus, as not only portable materials but also settlement enclaves have been identified on the French Mediterranean coast (Morel 2006; Riva 2010; Gailledrat 2015). Later Carthaginian colonization and overseas exploitation of Classical and Hellenistic times have likewise received little attention beyond specialist circles (e.g. van Dommelen and Gómez Bellard 2008), which despite the large volume of historical publications, is arguably also the case for the so-called Athenian Empire as far as colonization and cultural interaction on the ground are concerned (Osborne 1999; Morris 2009).

What all the research on Greek, Athenian, Carthaginian, Etruscan and Phoenician colonization or empire has in common, is that these peoples and their colonial networks or 'empires' are more or less abundantly documented in ancient literary sources, which has led to a perception that they were the active agents of Classical Antiquity, who effectively shaped the ancient Mediterranean of the first millennium BCE. This is underscored by notions like Hellenization and Romanization that take Greek, Punic or Etruscan material culture as a yardstick of connectivity and development in widely divergent cultural contexts around the Mediterranean (e.g. van Dommelen 2006; Prag and Quinn 2013; Versluys 2015).

This state of affairs has been called into question over the past two decades, as postcolonial theories have exposed the one-sided and often colonialist nature of Mediterranean colonization studies, and have drawn attention to the role of local inhabitants in colonial situations, highlighting their involvement in and contributions to cultural interactions and connectivity (e.g. van Dommelen 1997, 2012; Burgers 2004; Dietler 2010). As a result, grand narratives like Orientalization, Hellenization and Romanization, which have long been used to account for connectivity and cultural change in the Mediterranean throughout much of the first millennium BCE, have been exposed as narrowly defined and offering one-dimensional explanations; these approaches have accordingly largely been discredited – which is not to say abandoned (e.g. Whitehouse and Wilkins 1989; Riva and Vella 2006; Knappett this volume).

In the wake of the postcolonial deconstruction of these grand narratives, two quite divergent perspectives have emerged over the past decade or so that explain ancient Mediterranean colonization in particular, and connectivity and cultural change in general, in fundamentally different and not necessarily compatible ways.

On the one hand, there is a trend to examine colonial contexts and, more generally, cultural change and connectivity in specifically local and notably more complex terms of multi-faceted and long-term encounters. Drawing on the materiality of both the localized encounters and the long-distance connections, issues of identity, migration and hybridity have successfully been explored across wide stretches of Mediterranean time and space (van Dommelen 2002; Dietler 2010; Hodos 2010; van Dommelen and Knapp 2010; Vives-Ferrándiz Sánchez 2015).

On the other hand, but at the same time, a fundamentally different perspective has emerged that foregrounds not so much the local contexts but the connections between them under the heading of 'networks'. Drawn from the social sciences, network analysis has a long and checkered academic and intellectual history, including in archaeology (Knappett 2011: 15–26). In its latest guise, network-based approaches represent an attempt to conceptualize connectivity as an all-encompassing phenomenon with social, economic and political dimensions. The starting-point is that it is not just the actors, material culture and the local contexts that play a role in connectivity but that it is, on the contrary, the '*relationships* between entities like people, objects or ideas [that] matter . . . [and] . . . should be examined explicitly if we are to understand the behavior of these entities' (Brughmans 2013: 625, emphasis added; Knappett 2013). As acknowledged most explicitly by Knappett (2011: 48-53), an exclusive focus on connections gives network analysis a 'structuralist bias' that prioritizes the importance of network properties, and overlooks actors and their material culture, denying them any agency in the networks and associated interactions and culture change. What is at stake, then, are the scales of analysis that cannot be kept separate but must instead be integrated to involve on the one hand local actors and communities' agency on the ground and, on the other hand, the enabling or constraining properties of networks and connectivity (Knappett 2011: 61–145).

The network perspective has explicitly been taken up for the period under discussion in this chapter by Irad Malkin (2011) to discuss Greek colonization in the Archaic to Classical period. He begins by pointing out that 'the term "decentralized network" seems apt to describe the ancient Greek Mediterranean' (2011: 8) but then goes on to argue that 'the dynamics of the networks themselves [be allowed] an explanatory value' (2011: 16). In other words, Malkin gives far more weight to the structural dimensions of networks, and downplays the role played by the people involved, as is perhaps most evident from his conclusion that 'network dynamics . . . should probably be seen as the key to understanding why such connections could link and influence so swiftly' (2011: 222). While Greek agency is not entirely overlooked, other peoples and communities are not seen as contributing anything worthwhile to the colonization and cultural interaction processes (Malkin 2011: 209–23).

Even if Malkin's model of the distributed colonial network goes well beyond the traditional framework of the 'mother city', and shines a fresh light on connections and commonalities between Greek colonial foundations, the strict focus on exclusively Greek connections is problematic from a postcolonial perspective. It is most of all hardly capable of contributing to an understanding of long-term and long-distance cultural changes across the Mediterranean of the first millennium BCE as a whole, because it ignores interactions with other communities.

Globalization studies suggest a way forward at this junction, because they emphasize the cultural changes and interactions at the local level, even if developing in tandem with the broader structural connections of networks – which is not unlike the integrated scalar approach to networks as advocated by Knappett (2011: 122–23). Of particular interest in this regard is the notion of 'glocalization' that foregrounds the ambivalence of and interplay between the local and global or at least broader connections (Robertson 1994; see discussion in Hodos 2010: 81–83).

From networks to nodes

In order to move beyond grand narratives and grandiose terms, and to bring back into the discussion the postcolonial insistence on including all actors and their agency, I will turn to the Mediterranean of the first millennium BCE for a rapid survey of significant contexts of colonization, cultural entanglement and glocalization. In doing so, I will deliberately bypass the conventional colonial networks and home in directly on the local contexts of interaction. This approach enables me at one and the same time to sidestep problematic aspects of network

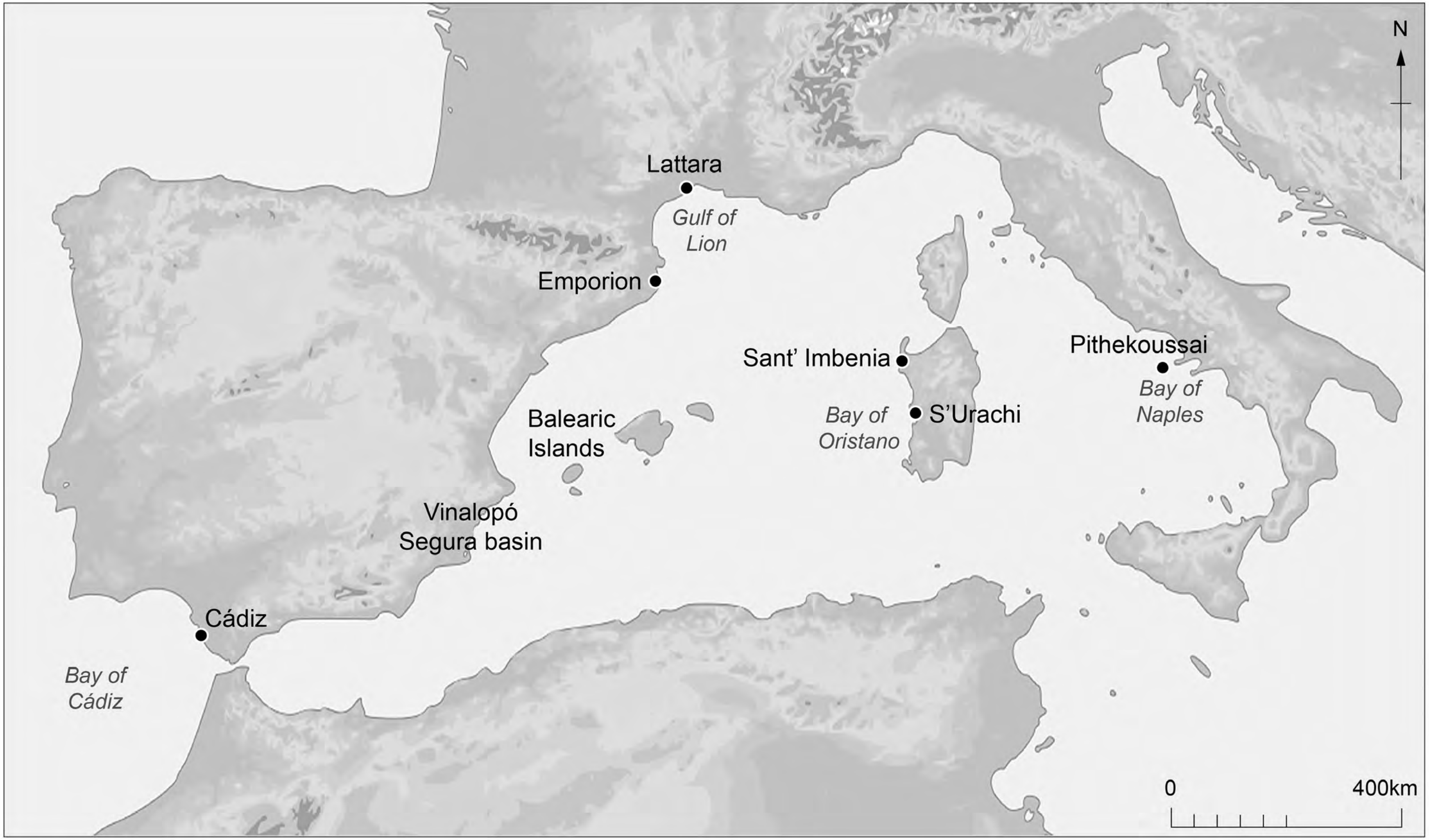

Figure 7.3.1 Map of the West Mediterranean showing the regions and key sites discussed

analysis as touched on above, and to focus on the nodes of the networks, where local actors literally created and maintained the connections, and where 'global' or network dimensions were actually embodied and materialized by these actors and their built and portable material environments.

In order to zoom in on the actors and contexts that made up the Mediterranean networks of the first millennium BCE, and to take a closer look at some of these nodes, I outline in what follows four regional contexts, situated across the western Mediterranean, where most colonial foundations were established, and briefly discuss key features of their archaeological record, and highlight to what extent and how these sites were both tied into wider Mediterranean networks and engaged with their local hinterlands (Figure 7.3.1).

Gadir and the Bay of Cádiz

The Atlantic shores of southern Iberia had become home to a Phoenician community as early as the end of the ninth century BCE, where they had established a distinctly Phoenician settlement and lived an explicitly Phoenician lifestyle, as is demonstrated by the recently excavated site of the Teatro Cómico. They occupied two-story Levantine-style adobe houses, and cooked on so-called tannur, most likely to make flat breads. The portable material culture in use belonged mainly to Phoenician cultural traditions, either imported or locally produced, but a notable percentage of indigenous vessels (around 30 per cent) as well as smaller quantities of Etruscan, Greek and Sardinian imports have also been identified (Basallote *et al.* 2015).

These archaic houses on the northern-most tip of the island of Kotinoussa constituted in all likelihood just one of a small number of settlement areas scattered around the Bay of Cádiz, with the famous temple of Melqart, for instance, situated farther south on another island, and other zones of habitation and productivity on the opposite mainland shores. Even if cult places and cemeteries were maintained, the habitation zones on the main island were abandoned towards the late sixth century BCE in favour of mainland locations, in particular at places like Puerto de Santa María, Castillo de Doña Blanca and Cerro del Castillo (Chiclana), which suggests a more intensive engagement with local communities; this in turn could well be interpreted as a local process of urbanization (Niveau de Villedary y Mariñas 2015; Wagner 2007). As is evident from evidence? in particular, interaction between the Phoenician settlers and the local inhabitants of the wider Bay of Cádiz from the eighth century onwards led to increasing changes in social practices in the seventh and sixth centuries, and a more substantial reorganization by the end of that time that involved all communities in the area (Marín-Aguilera 2015; Delgado Hervás and Ferrer Martín 2012).

Pithekoussai and the Bay of Naples

The small rocky island of Ischia at the northwestern end of the Bay of Naples hosted the oldest Greek settlement in the western Mediterranean, established at least by the mid-eighth century BCE, if not as early as the beginning of that century, given the site's connections with Carthage (Docter and Niemeyer 1994). The most extensive information comes from the cemetery in the Valle di San Montano on the northern tip of the island, where over 1,300 burials have been recorded; two houses have been documented at Punta Chiarito on the opposite coast of the island (Ridgway 1992: 45–103; De Caro and Gialanella 1998).

The cemetery evidence in particular has long been argued to show that Pithekoussai was not settled by Greeks alone, but that Phoenicians were involved from early on, and that they in fact made up a notable portion of the site's inhabitants (Ridgway 1992: 111–18; D'Agostino 2006: 222).

Similarly, while the choice of Italic-type metalwork, brooches in particular, as grave goods has long been interpreted as evidence that women from the Italian mainland (were) married into Greek colonial households, new physical anthropological information and careful analysis of burial assemblages suggest that substantial numbers of people from the Italic mainland were active and long-term members of the island's community, especially in the seventh and sixth centuries BCE (Coldstream 1993; Kelley 2012).

The picture that emerges from the excavations and analytical work is that as early as the eighth century BCE, Pithekoussai was already inhabited by a community of diverse origins. In time, it became increasingly and more directly involved in local networks across the Bay of Naples, as is evident from the distribution of Greek and Phoenician objects in local burials throughout Campania, and best documented at Pontecagnano; the increasing intensification of these connections are underscored by the foundation of the Greek settlement of Cumae on the Campanian mainland and the gradual consolidation and expansion of this site (D'Agostino 2006; Cuozzo 2007).

Sant'Imbenia and the Gulf of Oristano

Situated at the far end of a deep and sheltered cove on the northwest coast of Sardinia, the indigenous Nuragic settlement of Sant'Imbenia has yielded the earliest evidence of long-distance and overseas contacts and interaction in Sardinia for the first millennium BCE, dated to the late ninth and eighth centuries BCE. It consists of both Greek and Phoenician pottery in an early Iron Age Nuragic context of a communal or public nature that was dedicated to commercial and craft activities. Most remarkably, these imports are found alongside locally adapted and locally produced versions of Phoenician amphorae, adding an entirely new category of transport containers to the local ceramic repertoire (Oggiano 2000; De Rosa 2012; De Rosa *et al.* 2015).

While Sant'Imbenia continued to be connected overseas throughout the eighth century BCE, the northwest of Sardinia did not see the establishment of foreign settlements, unlike the far south of the island, where the Phoenician site of Sulky (Sant'Antioco) was established in the later eighth century BCE, and the area around the Gulf of Oristano on the central west coast, where Tharros was founded sometime in the early seventh century BCE. In the latter area, moreover, Phoenician or more generically foreign settlers interacted intensively with, and possibly resided among, local Nuragic communities, as at the indigenous site of S'Urachi farther inland (Tronchetti 2014). Situated halfway between Tharros and S'Urachi, the ceremonial and burial site of Monte Prama, with its row of pit burials overseen by two dozen impressive life-size statues, is another clear indication of intensive and complex interaction between local and overseas communities at a slightly earlier date (late eighth to early seventh century BCE: Tronchetti and van Dommelen 2005; Minoja and Usai 2014). A good measure of the intensity of interaction within this region is provided by recent excavations at S'Urachi, where Nuragic-style buildings constructed around and against the *nuraghe* continued to be occupied into the sixth and fifth centuries BCE, while nearly all portable material culture, pottery in particular, was of Phoenician types, mostly locally manufactured using a variety of techniques (Roppa 2015; Stiglitz *et al.* 2015).

Emporion and the Gulf of Lion

In the far north-western corner of the West Mediterranean, Etruscans were the first foreign traders and settlers to frequent the extensive lagoons and marshy lowlands that make up the long arc of the Gulf of Lion in the later decades of the seventh century BCE. Their presence is mostly visible in the substantial numbers of Etruscan amphorae that found their way to a great many indigenous sites on the coast and in the nearest hinterlands. Because these containers are mostly accompanied by high-handled shiny black drinking cups, so-called *bucchero kantharoi*, and pitchers, this trade evidently concerned the import of Etruscan wine into Mediterranean France and entailed the introduction of at least some Etruscan drinking habits. As is evident from the indigenous site of Lattara (Lattes, on the outskirts of modern Montpellier), these commercial activities intensified in the later sixth century, when a substantial house in the site was in all likelihood occupied by Etruscan merchants, and the area around Lattes and Montpellier also received more and a wider variety of Etruscan imports, including bronze work (Dietler 2010: 94–104; Riva 2010; Gailledrat 2015).

By that time, however, Greek, more specifically Phocaean, settlers had also arrived on the scene and unlike their Etruscan predecessors they were quick to establish a number of settlements around the Rhône estuary around 600 BCE, of which Massalia (Marseille) was surely the most prominent one. Within a relatively short time, amphorae, 'grey ware' drinking vessels and wine produced in the lower Rhône estuary displaced Etruscan imports and before long other Greek settlements were founded further west, as Greek traders also set up shop in indigenous settlements like Lattara and Saint-Blaise (Dietler 2010: 104–22).

The Phocaeans also looked beyond the Gulf of Lion from early on, and founded Emporion, modern Empúries, some 300 km west of Massalia as early as the second quarter of the sixth century BCE. It began as a small Phocaean presence among a local Iberian community on a rocky island just off the Catalan coast, famously termed *palaia polis* by Strabo (3.4.8), but a new town (*nea polis*) was established on the mainland just a few decades later. This settlement rapidly developed intensive connections with the Catalan hinterland and by the fifth century, Emporion had become a key connector between Massalian and other Greek, Iberian, southern French and Punic traders, settlers and inhabitants (Domínguez Monedero 2013; Miró and Santos 2014).

These outlines describe just four colonial situations that developed in the earlier centuries of the first millennium BCE in the West Mediterranean. As may be evident from these brief descriptions, they not only transformed the regions that they were part of, but they also had a substantial impact on areas further away. As this particular selection comprises some of the best known and most widely researched colonial foundations, these four sites probably do not constitute a random or representative sample of colonial activities and achievements in the Mediterranean throughout the first millennium BCE; they represent on the contrary but a small fraction of the numerous new settlements that were founded, and of indigenous communities that saw foreigners settle in their midst over these centuries. The significance of these four colonial situations is rather that they exemplify more explicitly than others elsewhere the particular and multi-faceted complexity of developments unfolding over the first millennium BCE.

Material interactions and local connections

The common denominator of the four contexts outlined in the forgoing section is that their histories are not straightforward, and that what happened in these areas over the centuries cannot be boiled down to either Greek or Phoenician colonizers arriving and settling down to take over the area. The cases of Pithekoussai, Massalia and Emporion might appear most evident in this regard, as it is clear that both Greeks and Phoenicians or Greeks and Etruscans were involved – if we are to assume that colonial involvement was key. If, however, we heed the postcolonial call to take into account the indigenous roles in these colonial situations, we can see how in all four cases local inhabitants played a substantial role in the shaping of developments.

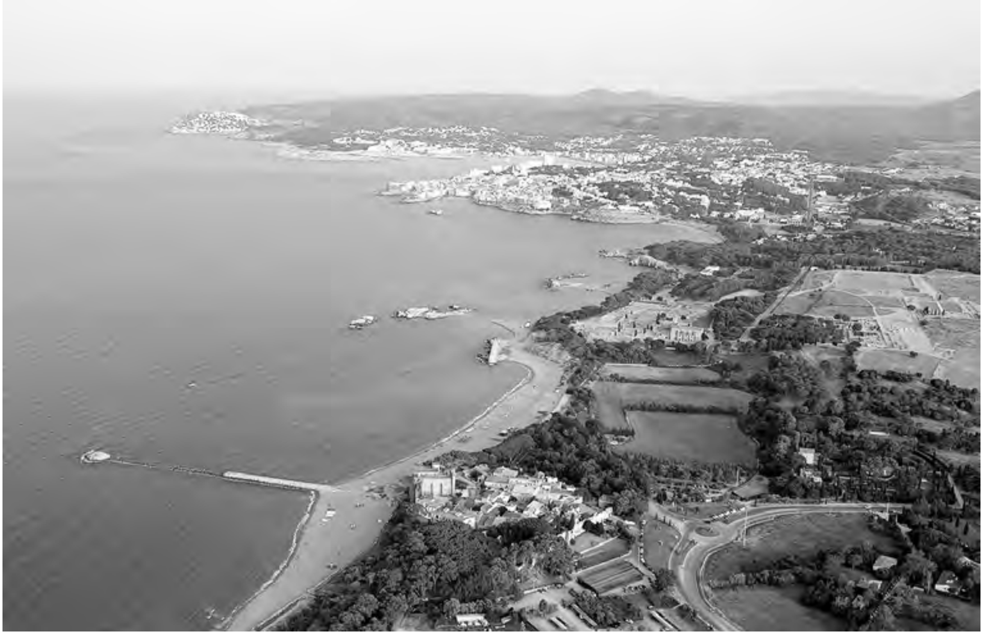

Figure 7.3.2 Aerial view (looking south) of the erstwhile island, now headland, of Sant Martí d'Empúries (foreground), with Emporion further down the coast (courtesy M. Santos Retolaza)

In all four instances, incoming foreigners were first housed among local communities, and it was only in certain cases that new establishments were set up or existing ones thoroughly reorganized, as for instance in Empúries and Lattes. The conventional view of Greek and Phoenician colonial networks is thus not only strongly predicated on a colonialist perspective, but it also overlooks a notable part of what actually happened on the ground. It may therefore readily be evident from these brief case studies that it is far more instructive to explore these four situations as distinct contexts of colonial and cultural interactions and to compare them on their own merits rather than to privilege specific colonial connections and to separate them out into Greek and Phoenician networks.

A focus on the local contexts of colonial situations not only enables us to move away from a colonialist bias, but it also offers a fresh vantage point to approach the 'Mediterraneanization' of the first millennium BCE – and thus to return to the key question of what role globalization may play in the conceptualization of these cultural and economic transformations that can be traced throughout the Mediterranean of the first millennium BCE. Homing in on local contexts also dovetails with my earlier argument to unpack the nodes where the connections were made that add up to the overarching networks, whether colonial or otherwise, in order to understand how connections were created and managed.

The first point is best explored by returning to the rocky island of Sant Martí d'Empúries in the northwest Mediterranean, which is today a prominent headland surrounded by silted up marshlands where the first Greek sailors settled among a local community in what would later become known as the *palaia polis* of Emporion (Figure 7.3.2). The Mediterranean ramifications of this place are manifold, and begin with the late Bronze Age settlement on the island, whose inhabitants maintained extensive contacts with the interior regions of the Empordà plain and the steep slopes, upland valleys and high peaks of the Pyrenees farther inland from as early as the tenth century BCE. They also engaged in overseas connections, as is underscored by Phoenician amphorae of mostly seventh-century date, i.e. predating the Greek arrival, and which can mostly be traced back to Andalusia. Bronze tools and scrap metal suggest that metal played a key role in these connections (Santos Retolaza 2003; Vives-Ferrándiz Sánchez 2015).

What the case of Sant Martí d'Empúries, or more broadly the Ampuritan colonial situation, conveys most readily is the multitude of connections that this locale was involved in and how they changed over time. This means that it is only with hindsight, i.e. in the light of developments of the sixth century BCE and later, that Emporion can be considered a cornerstone of a Greek colonial network. These earlier connections have usually been grouped together under the heading of 'precolonial explorations' and subsumed as a mere 'prequel' to the colonial expansion that 'really mattered', i.e. the Greek or possibly Phoenician ones (Ruiz-Gálvez Priego 2000). A rather different interpretation of the 'precolonial' contacts and other indigenous Late Bronze and Iron Age evidence, however, proposes that when Phoenicians and Greeks arrived in the West Mediterranean, they encountered many short- and long-distance networks, partially

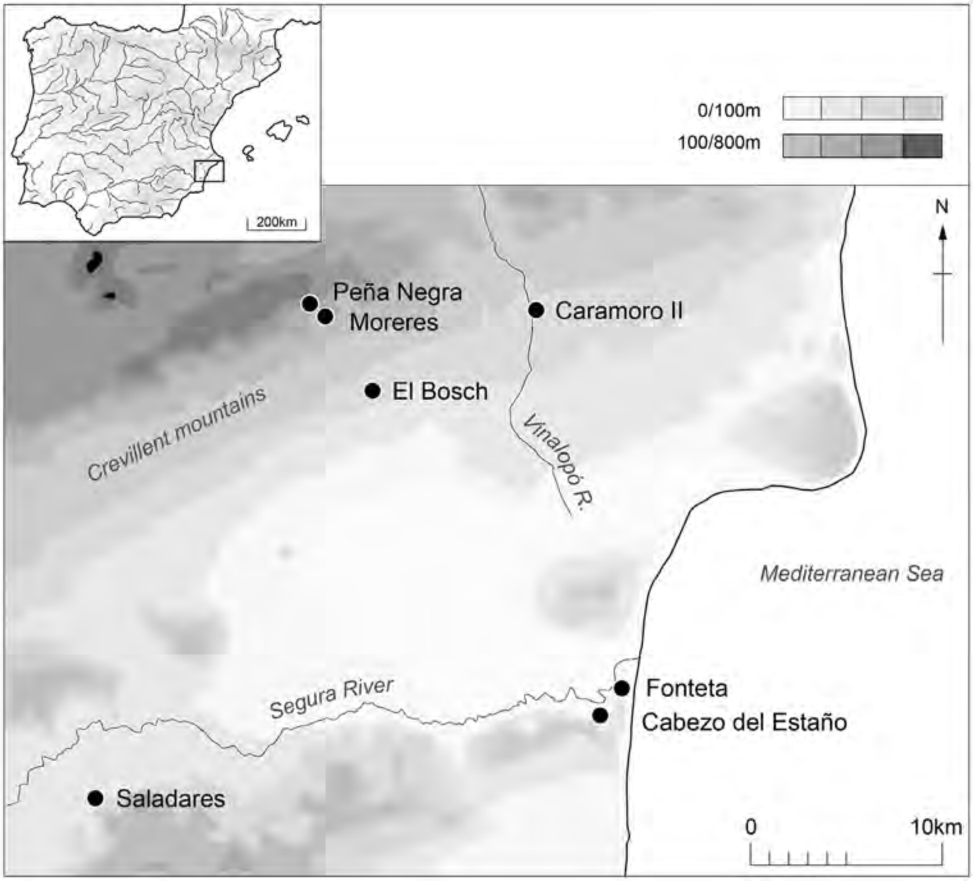

Figure 7.3.3 Map of sites mentioned in the lower Segura and Vinalopó basin and the Crevillent mountains in the province of Alicante, Spain (cf. Vives-Ferrándiz 2010, figure 10.1; courtesy J. Vives-Ferrándiz)

overlapping and of course changing over time, and that rather than forging new connections, they joined or were coopted into these networks – and as they participated, these connections continued to change (Calvo *et al.* 2011; Broodbank 2013: 445–592; Ruiz-Gálvez Priego 2014; Vives-Ferrándiz Sánchez 2015).

A case in point is the area of the lower Segura and Vinalopó, half-way along the Mediterranean coast of Iberia (province of Alicante), where Late Bronze and Iron Age sites (tenth–seventh centuries BCE), like Peña Negra and El Bosch in the surrounding Crevillent mountains, and Cap Prim on the Cap de la Nau headland, have not only yielded evidence of metallurgic activities and connections up and down the coast and to the Balearic Islands; they also evidence intensive interactions with Phoenicians who frequented the area and settled at La Fonteta by the late eighth century BCE (Vives-Ferrándiz 2010, 2014, 2015; Figure 7.3.3). Another case in point is the increasing number of Sardinian items of Nuragic Iron Age date that are recognized throughout Andalusia in both Phoenician and especially indigenous contexts, and that cannot be reduced to by-products of Phoenician trade, even if Phoenicians were involved on both sides of the West Mediterranean Sea (Botto 2015b).

It also follows from the forgoing, that the local situation is key to understanding why connections were created or given up. At the heart of this endeavour to grasp how 'nodes worked' necessarily lies material culture, in part because it is the most abundant source of information available, but also, and indeed primarily, because material culture is and was a critical constituent of cultural interactions – which may in fact be understood as 'material connections', because so much of the contact was mediated by material culture (Knapp and van Dommelen 2010; van Dommelen and Rowlands 2012).

Hybridity and material culture may at first sight constitute the conceptual cornerstone of a locally or locality oriented perspective on contact, interactions and networks, and ultimately globalization, because 'hybrid objects' characterize all contact situations of some longevity and intensity, even if they do so at a somewhat superficial level. Rather more pertinent is, however, that a closer look at the actual contexts of practice and interaction at the locales or nodes concerned, taking into account that meanings of objects are socially and locally constructed, may make it possible to discern whether 'hybrid objects' were appropriated into preexisting local practices or had become part of new and hybrid practices, which in turn denote sustained and intensive situations of co-presence and involvement. As argued elsewhere, hybridity and material culture may thus serve to gauge the mode and intensity of cultural interaction (van Dommelen and Rowlands 2012; Liebmann 2015; cf. Vives-Ferrándiz 2010).

As argued already two decades ago by Arjun Appadurai (2010b: 10, 2010a: 8), it is these local contexts of interaction that constitute 'the site of the mutual transformation of circulating forms' and that underlie 'the creative appropriation of the global' – and that through the 'production of locality' in turn constitute and sustain the globalization process itself (Appadurai 1996: 178–99; cf. Miller 1995).

Conclusions: Mediterranean *mélange* and local interventions

To wrap up my arguments, I return to the core question of this chapter and indeed of the volume as a whole – what and how can globalization contribute to our understanding of the connections and interactions in the Mediterranean of the first millennium BCE? And, no less, what do our archaeological insights add to the conceptualization of globalization?

As I have argued in the previous sections, the answers to these questions should not be sought within supra-regional or 'global' networks spanning all or most of the Mediterranean.

On the contrary, I propose that answers, and I advisedly use the plural, can mostly be found in the local contexts and localities that made up the so-called network 'nodes'. In response to what Appadurai (2010b: 10) has termed the 'conundrum of the local and the global', I suggest that the question should be turned on its head: rather than asking how 'global' trends influenced, transformed and determined local and indigenous conventions, we should explore how local receptions, selections, adaptations and rejections of meanings and practices shaped and transformed those 'global' influences and created the 'global *mélange*' (Nederveen Pieterse 2015, this volume).

Such a local, 'bottom-up' approach crucially acknowledges the involvement of all participants in the cultural interactions, whether local, indigenous, foreign, or indeed passing through. This is, not accidentally, precisely what my rapid survey of a handful of ancient Mediterranean colonial situations suggests, in which the consistent involvement of indigenous communities was a constant key factor, even if not always and everywhere were the same colonial and indigenous societies involved. These interactions more often than not involved routine practices and were mediated by and imbricated in material culture, and are thus eminently traceable archaeologically.

At the same time, and by extension, this local perspective offers a way to begin to see the earlier centuries of the first millennium BCE in terms of 'Mediterraneanization' and to move beyond Hellenizing, classicist and colonialist biases in Mediterranean archaeology. While 'global' and Mediterranean cannot and should not be conflated, there are clearly sufficient structural and conceptual similarities 'to draw out those multi-faceted interactions within and between various communities' and to highlight 'the plural social and cultural tensions prevalent' in situations of intensive cultural interaction, both past and present (Hodos 2010: 99, 101). As ethnographic work has amply demonstrated (e.g. Miller 1995), an emphasis on material culture and its socially constructed meanings is key to understanding these local interactions and entanglements.

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7.4

The globalized Roman world

Robert Witcher

Introduction

If the existence of pre-modern globalization, or the application of theories of globalization to the ancient world, has been controversial (see Jennings this volume; Robertson this volume), there is no doubt that the Roman example holds a special place within this debate. For if an empire spanning parts of Europe, Africa and Asia and characterized by the mass production, exchange and consumption of a shared material culture does not qualify as a form of globalization, then it is improbable that any other pre-industrial example qualifies either. For scholars of past globalizations, the globalized status of the Roman Empire is a given. Their challenge is to find earlier, smaller or unexpected forms of globalization; the Roman Empire is the baseline, not the finish line.

Publications on Roman globalization demonstrate a tentative start and a diversity of scope and ambition. Over the past 15 years, a scattering of papers has explored the possibilities (e.g. Witcher 2000; Sweetman 2007; Hitchner 2008; Pitts 2008; Boozer 2012) leading to the publication of an edited volume which has deepened thinking and revealed a difference of opinion about the value and limitations of using globalization to think about the Roman Empire (Pitts and Versluys 2015a). Meanwhile, more general treatments of the Roman past increasingly adopt the terminology of globalization (e.g. Panella 2012: 110–11 sees a 'globalizzazione' of Roman production and commerce) without always specifying what precisely is intended. Do these different studies help to shed new light on the Roman past or do they simply retell the conventional narrative of the Roman Empire in new words (see Naerebout 2006–07)? The latter is a concern, for if globalization is used simply as a synonym for existing explanations of Roman cultural change we are unlikely to discover anything new about the Roman world or to understand it differently (Gardner 2013; Pitts and Versluys 2015b; Versluys 2014).

This chapter argues that there is, in fact, much to be learned by thinking about the Roman past in terms of globalization, but that this enterprise raises particular challenges. The intention is not to dispute that the Roman Empire was globalized, but rather to encourage caution in how we conceptualize and measure that globalization. To this end, the chapter starts with a series of vignettes intended to draw attention to different expressions of Roman globalization. Next, it examines two of the most frequently discussed indicators of Roman globalization: roads and human mobility, noting both possibilities and problems. From here, the chapter moves to a broader discussion of the theory of Roman globalization, emphasizing wider spatial and chronological context. Finally, attention turns to the concept of identity in the globalized Roman world. These respective themes – decentring, connectivity and mobility, plus identity – map on to the areas identified by Morris (2003: 37) in his globalizing study of Mediterranean history (see also Nederveen Pieterse 2015: 228–29).

Before continuing, however, it is important to address an issue of specific concern regarding globalization and the Roman past. The privileged status of the Roman Empire in Western historical accounts is linked to the ancestral value the West draws from Rome. Indeed, Greco-Roman globalizing ideologies inform contemporary political thought: *orbis terrarum*, *oikoumene*, *humanitas*, the *pax romana*, and universal citizenship (Robertson and Inglis 2004). Most obviously, Polybius provides a model of global history (*symploke*), and Rome's role within it, by narrating the interconnection of Mediterranean events from the late third century BCE onwards (e.g. *Polyb*. 2.13.3–7). Thus, Woolf (2012: 27) observes, 'Our age has rejected the language of empire, arguably without always surrendering much of its power' (see also Morley 2010: 134–35). In light of this, post-colonialists have expressed concern that the application of globalization to the Roman past is not only anachronistic, but also politically naïve. It may, for example, provide legitimacy to the Western globalization project (Hingley 2005, 2015) or, through use of language such as 'negotiation', underemphasize the scale of violence involved (see James 2011). These specific concerns deserve attention, but the wider scholarly project concerning pre-modern globalization finds support in the work of Jennings (2010), who argues that Western society has hijacked the concept of globalization for its own political purposes ('modernity's greatest theft'). Indeed, the examples presented elsewhere in this volume demonstrate that studies of past globalizations can *de*-centre Western narratives about the present world-order. Hence, the study of Roman globalization must not view the Roman case as *sui generis*, or as a precedent for the current world, but rather must seek to contextualize it with other historical globalizations in order to *provincialize* it spatially (e.g. alongside contemporary globalizations of the Indian Ocean and China, Seland 2008; Shelach-Lavi 2015) and chronologically (e.g. the earlier Greek world, Vlassopoulos 2013). The latter, in particular, permits us to see how early Rome was itself a glocalization of Greek culture on the periphery of an East Mediterranean network.

Vignettes from a globalized Roman world

To illustrate the interconnectivity, human mobility, scale, and diversity of the globalized Roman world, we begin with four vignettes drawing on archaeological and textual evidence. Two are fictionalized first-person accounts emphasizing situated experience, and two are third-person accounts that consider linkages and understandings inaccessible or unimaginable to individuals in the past (Figure 7.4.1).

Tiber valley, Italy c.85 CE

> I grew up in the hills of Samnium. My family was pushed off its land by a greedy magistrate keen to turn the territory over to sheep farming; my father had fallen into debt, providing an excuse for his unscrupulous creditor to act. We moved to the town of Saepinum where my father worked as a labourer. Later, I was sent to live with my uncle who rented a farm in the Tiber valley, 20 miles north of Rome. He had made a success of growing market

crops and had acquired sufficient wealth and reputation to buy land and to become a junior magistrate on the local council at the city of Veii. Whilst he furthered his political career, I took over management of his farm.

Today I have been to Veii, visiting my uncle and hearing news from Rome about the Egyptian harvest – rumours are rife that the Nile did not flood and grain prices are rising. While in town, I bought new tablewares (red-slipped *terra sigillata*). Our old service is pretty worn and, besides, there were some fine new drinking cups from the *figlina* (pottery workshop) down by the Tiber; apparently everyone in Rome is using them at the minute. As I was at the market, I also bought bread and pork. Next week I make my annual trip into Rome to see the games. I don't spend longer in the city than I have to – it can be dangerous – but the Colosseum is like nothing else! Last year, I even saw the emperor, or at least I saw a tiny figure in the imperial box; he didn't look very god-like.

(elaborated from information in Patterson 2006 and Witcher 2005)

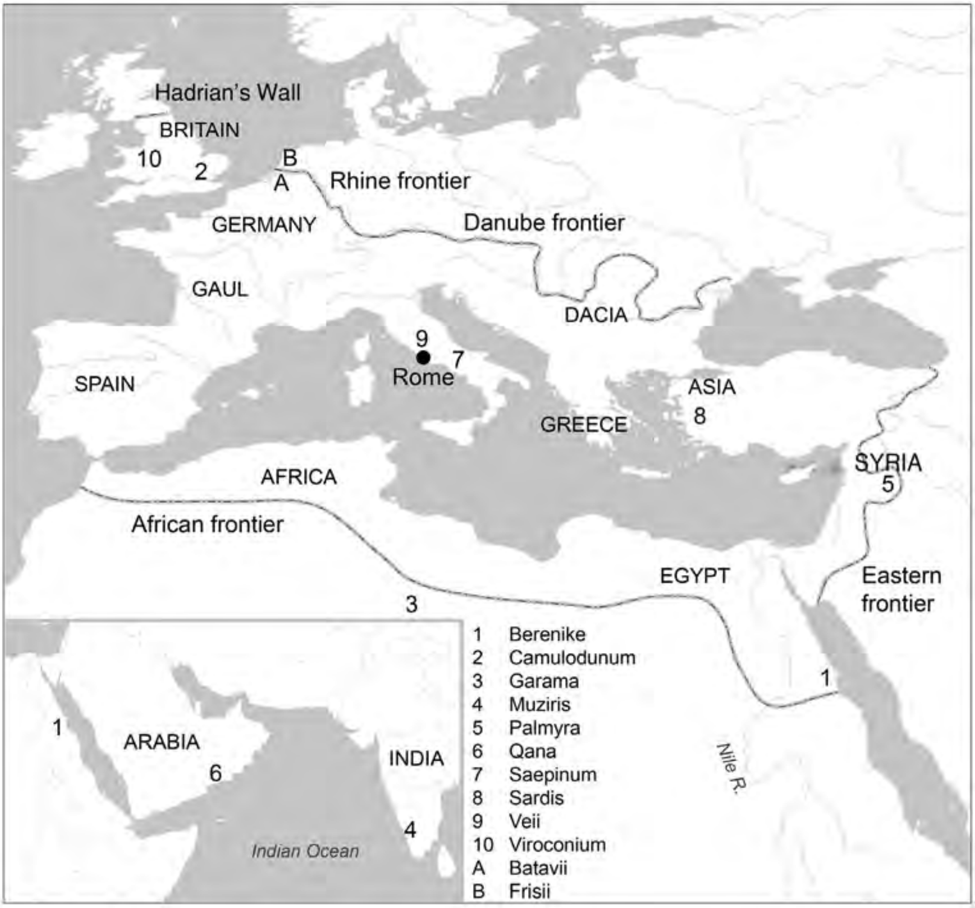

Figure 7.4.1 The Roman world and places discussed in the text (based on BlankMap-World-large3.png available under Creative Commons Attribution-Share Alike 3.0 Unported licence 3.0 @2006 Roke with modifications by R. Witcher)

Garama (Jarma, Libya), c.100 CE

A journey of 1000 km south from the Mediterranean coast brings us to the outskirts of the Garamantian capital of Garama and one of its cemeteries (modern Saniat Bin Huwaydi). A family of mourners lowers their deceased relative into a grave (T52). The body is laid out and surrounded by grave goods for feasting and drinking, nearly all of which are imported, some specifically for this purpose. The grave goods include Tripolitanian oil amphorae; *terra sigillata* bowls from Italy, glass vessels, and oil lamps. In addition to these imports, the mourners include a small handmade ceramic incense burner and two saddle querns, the latter perhaps heirlooms, as new 'Roman-style' rotary querns were by then used for grinding grain. The imported goods are exotic, but not reserved exclusively for the elite; rather they are included in the burials of a wide cross-section of society. The mourners deliberately chip some of the grave goods as they are deposited, perhaps ensuring they cannot be used by the living. Once the ceremony is complete, the grave is filled and covered with a mud-brick pyramid. The mourners return home; they will not eat and drink from *terra sigillata* dishes and glass bowls again until the next funeral.

(Elaborated from information in Mattingly 2010a: 291–95)

En route from Muziris (Pattanam, India) to Berenike, Egypt, c.100 CE

The winter winds carry us west with a cargo of pepper, cotton textiles, gemstones and glass beads. There's not much market for Indian pottery in Egypt – especially when compared to the profits to be made from pepper – so we take only a few (Coarse Red Slipped Ware) cooking pots for use on board. We often use these pots once ashore too; they remind us of home while we wait for the return winds. We've also brought rice for the journey, and some for the coming months – the wheaten bread in Egypt is indigestible! When we return on the summer monsoon winds our cargo will be amphorae (Dressel 2–4) of wine from Campania in the far west. We'll also take a few crates of red-slipped tablewares (Italian or Eastern Mediterranean *terra sigillata*). We'll make our profit on the wine, but we can always sell some drinking cups on the side; the Red Polished Wares from northern India look pretty similar, but they really aren't the right shape for drinking wine. On the way back, we plan to stop at the port of Qana (Bir Ali, Yemen) in southern Arabia, where there are profits to be made on wine and *sigillata*, then onto northern India and finally down the coast to Muziris. With luck, we'll make it home before the Egyptian and Roman merchants arrive with their own cargoes of wine, silver and even wheat—the *yavanas* import it for their compatriots who live in Muziris—they do like their bread!

(Elaborated from information in Tomber 2008)

Camulodunum (Colchester, Britain), c.50 CE

During the century before the arrival of the Roman army in 43 CE, the Trinovantian aristocracy had culturally transformed itself through contacts with northern Gaul and Augustan Italy. New forms of material culture were used to signal status and identity. This 'Aylesford-Swarling' culture included imported wheel-thrown Gallo-Belgic beakers for drinking wine, and other feasting equipment, as well as new elite burial practices and the minting of coins. Hence, by the time the *Legio* XX was established in its fortress at Camulodunum (43–49 CE), there were long-established links with the Roman world including the importation of

Italian wine in Dressel 2–4 amphorae. Massive expansion of military supply lines brought even more Roman material culture and foodstuffs into the region, but the local elite maintained use of 'traditional' Gallo-Belgic drinking vessels. Hence, both Roman soldiers and Trinovantian aristocrats enjoyed the contents of Dressel 2–4 amphorae, but they drank from different vessels, signalling different identities. Meanwhile, for the majority of the British population, the consumption of wine and the use of tablewares of any description remained anathema. These rural communities may have discerned greater social and cultural distance between themselves and the Trinovantian elite than between that elite and the Roman military. Little changed when the *Legio* XX moved northwards, handing over its fortress to a colony of Roman veterans: soldiers became retired soldiers; barrack blocks became houses; merchants ensured the continued supply of wine and olive oil, and the appropriate equipment with which to consume them including *terra sigillata* tablewares from southern Gaul. Perhaps neither the arrival nor the departure of the Roman army, marked decisive breaks. Within a few years, however, the Boudican revolt would change everything.

(Elaborated from information in Perring and Pitts 2013)

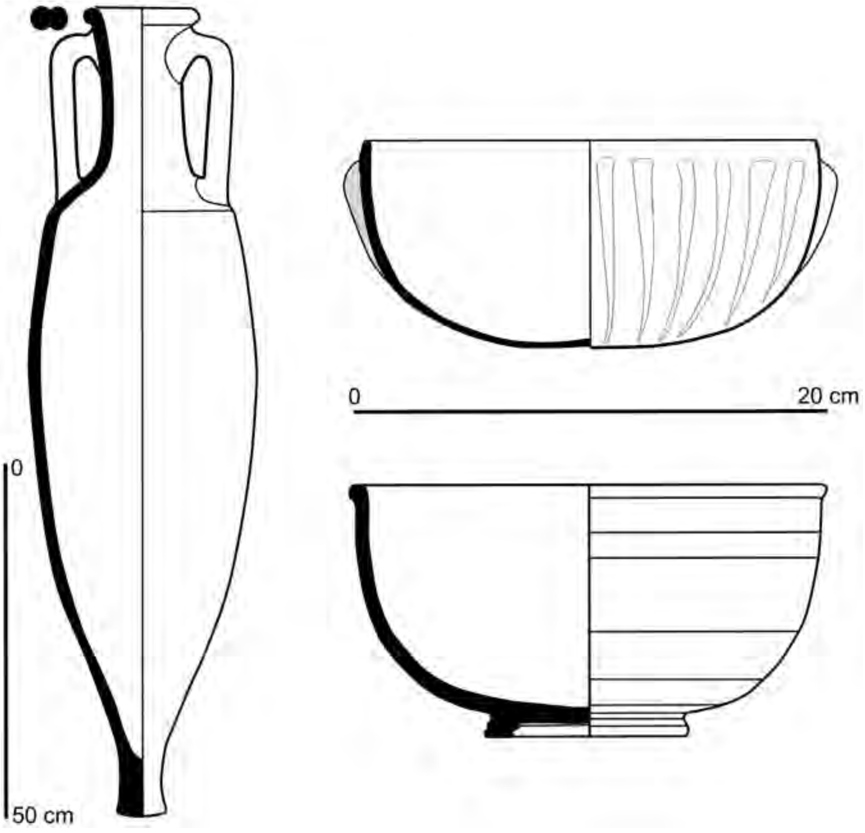

Figure 7.4.2 Examples of material culture widely exchanged around the Roman world including wine amphora (Dressel 2–4), pillar moulded glass bowl (Isings 3), and *terra sigillata* bowl (Dragendorff 37) (R. Witcher)

From one perspective, these vignettes illustrate the traditional – and much critiqued – concept of 'Romanization': peoples of different political, cultural, economic and social backgrounds drawn, through military force and elite example, into an increasingly uniform body of Roman citizens/subjects defined by shared material culture. Here, this shared material culture is represented by *terra sigillata* and Dressel 2–4 amphorae (Figure 7.4.2), though it might have included anything from pillar-moulded glass bowls to monumental forum complexes. Alternatively, these vignettes might be taken to indicate precisely the *lack* of shared identity and integration around the Roman world: the diversity of social and economic organization and the experience of Roman colonialism, the different foodways, the proliferation of cultural, ethnic and professional identities, and local ritual beliefs. Little appears to link a farmer in the hinterland of Rome, a deceased Garamantian, an Indian Ocean trader and a Trinovantian aristocrat. All may have used *terra sigillata* vessels, but these were produced in multiple locations and exchanged, used and deposited in quite different ways and contexts.

This chapter takes these vignettes as evidence for neither cultural homogenization ('Romanization') nor cultural fragmentation, but rather for both – that is, Roman globalization. Collectively, they demonstrate aspects characteristic of globalization including: interconnectivity, global consciousness, the long-distance movement of people and commodities, imitation and adaptation of objects, repurposing of commodities with new functions or values, the reinforcement or exaggeration of existing inequalities, and the creation of new ones (see chapters by Feinman, Jennings and Robertson this volume); most importantly, they stress the proliferation of identities. With these snapshots of the globalized Roman world in mind, we turn to the bigger picture.

Networks: roads and human mobility

Maps of the Roman Empire traditionally depict a series of provincial territories, enclosed within definitive imperial frontiers (Figure 7.4.1). Such images reflect the imposition of a nation-state mentality onto the past; in turn, these maps influence perceptions – provinces appear culturally bounded and homogeneous. One solution is to move from a territorial model to a network approach (see Smith 2005). Networks have already gained significant traction in studies of the Greek world (e.g. Malkin 2011), perhaps because it lacked any physical or symbolic 'centre' equivalent to Rome. But networks offer possibilities for the study of the Roman Empire as well. In particular, networks put less emphasis on territory and more on connectivities, reconceptualizing the 'Roman Empire' as a more expansive 'Roman world'. Such network thinking relates directly to globalization through connectivity. Indeed, Knappett (this volume) calls for a merging of globalization and network concerns and the development of tools to address connectivities – their type, strength, content and directionality. The value of this approach is to provide specific indices of globalization, facilitating better understanding of the drivers and/or symptoms of globalization, such as time–space compression, that is, the speeding up of communication and the increasing interrelation of previously unconnected people, places and events.

Partly under the influence of Horden and Purcell's *The corrupting sea* (2000), there has been rise of interest in Mediterranean maritime network connectivity (e.g. Keay 2012). Indeed, it is precisely the existence of this inland or 'Middle Sea' (Broodbank 2013) that differentiates the Roman Empire from other contemporary polities such as the land-based Parthian or Han Empires. But the Mediterranean notwithstanding, the most widely discussed Roman 'network' is the road system. The extensive system of highways – perhaps not coincidentally, easily represented on maps in a way that maritime routes are not – facilitated the mobility of people, goods and ideas, and has been used as a powerful proxy or metaphor for Roman globalization (e.g. Laurence 2013).

For decades, the primitivist view of the Roman economy held that land transport was slow and expensive, especially when compared to sea transport (Finley 1999). But as Laurence (1999) has emphasized, although relatively expensive, land transport remained the principal form of mobility. This re-instatement of Roman land transport has paved the way for a more optimistic evaluation of the impact of road building. Laurence and Trifilò (2015: 111), for example, argue for reduced journey times around Italy. Moreover, they suggest that Italian cities on consular roads possessed more impressive monumentality due to greater familiarity with urban symbolism facilitated by time–space compression. Others, however, are unconvinced. Morley (2015: 55), for example, concurs that roads may have made some journeys easier, more predictable and slightly faster, but argues that these improvements were insignificant in terms of overall time–space compression.

One approach to these contrasting evaluations of transport networks is to introduce an element of quantification; Scheidel (2014) has used network modelling to examine the 'shape of the Roman world'. The ORBIS Geospatial Network Model of the Roman World (orbis.stanford.edu) replaces an approach based on distance with one based on time and cost (Figure 7.4.3). This approach quickly demonstrates the enormous 'connectivity cost constraints' (Scheidel 2014: 8) incurred by movement across the Roman world. Roads connected the Empire together – but the cumulative cost of land travel was high. This is of significance for understanding the regionality and cultural heterogeneity of the Empire. Even though the Roman state could project itself powerfully on distant imperial frontiers, such concentration of resource was exceptional; within the provinces, Rome instigated no significant technological means to compress time and space, in order to bring the state closer to its subjects (Morley 2015). Hence, the slight compression brought about by paved roads was dwarfed by the immense distances involved. Eventually, by the third and fourth centuries CE, the failure to overcome this friction of distance pulled the centre of power away from the Mediterranean towards the frontiers of the north-west and east (Scheidel 2014: 26).

Scheidel's analysis focuses on the movement of bulk-goods, and political and military networks; it explicitly excludes prestige-goods networks and gives limited attention to information exchange. For many globalization scholars, however, it is precisely this latter consideration that is important. Ideas, symbols, identities and consciousness of the wider world, are what underpin globalization and, more importantly, have the potential to extend furthest through time and space as they experience less friction than bulk goods (Witcher 2000). Indeed, no matter what the 'cost constraints' working against the size and integration of the Roman world, we must recall that the Roman state successfully gathered thousands of communities around a small but powerful set of shared ideas, reinforced through material culture, which promulgated a unifying (but not universalizing) imperial ideology (Ando 2000: 8). In other words, mapping the distribution of bulk-goods and military infrastructure will get us so far, but it is information, ideology, ideas and identities that are likely most fully to reflect Roman globalization.

This symbolic imperial integration can also be approached through road infrastructure, specifically milestones. For example, Laurence and Trifilò (2015: 111) suggest that the measurement of distance on milestones constituted a time–space compression, geo-referencing travellers within the wider Roman world. Talbert (2012: 247), however, observes that milestones were nearly always inscribed in Latin, even in the Greek East, and rarely refer to distance to Rome; milestones were not for the benefit of travellers, but rather local demonstrations of loyalty to the emperor. Yet even if these milestones could not physically geo-reference travellers, they can be understood as the means through which local/global relations were negotiated, referencing individual communities in relation to the imperial network (see Glatz 2009: 138).

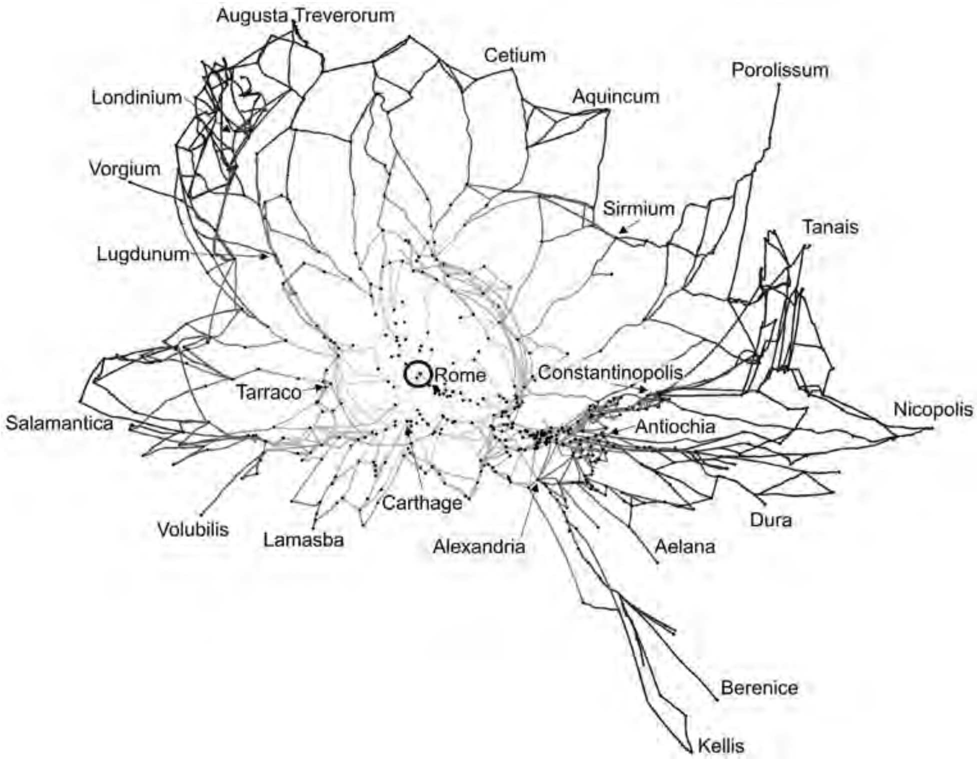

Figure 7.4.3 The Roman world as a network (cartogram) based on the fastest routes from Rome on foot at 30 km per day during summer. Time is visualised by both shading (the darker the route, the more days required) and by location (geographical coordinates are shifted so that absolute distance is replaced by relative travel time). Constantinople is 21 days from Rome; London is 27 days. Generated at orbis.stanford.edu.

Roads are central to the discussion of Roman globalization, but as these examples demonstrate, we require a better understanding of exactly *how* they were used. The key question is therefore not whether there was connectivity, but the causes and effects of that connectivity, and the degree – qualitatively and quantitatively – to which it changed over time. The study of Roman roads has not always enjoyed a positive reputation amongst professional archaeologists; a globalization perspective repurposes such research with the critical analysis of issues of scale, connectivity and integration.

If the road network as a proxy or metaphor for globalization presents conceptual and practical problems, what about mobility more broadly construed? There is, after all, consensus that the Roman period was characterized by unprecedented levels of human mobility (e.g. Woolf 2012: 227). Textual and epigraphic evidence have long been used to document significant human mobility around the Empire: colonization, the army, trade, slavery, imperial administration, pilgrimage and tourism. More recently, techniques such as isotope analysis have demonstrated the movement of individuals within and between regions. But how representative is all of this evidence? Funerary inscriptions do not reflect a full cross-section of society and may be skewed towards groups who were particularly mobile, such as soldiers, freedmen or merchants (Noy 2000). Similarly, isotope studies to date have concentrated on urban communities (especially Rome and Portus) that might be expected, a priori, to demonstrate higher levels of mobility (e.g. Killgrove and Montgomery 2016). Hence we are left with fundamental questions: how much mobility? Was a larger percentage of the population moving? Were new groups and individuals on the move? Were people making longer or more frequent journeys (Eckardt 2010)? Were more goods (e.g. stone, Russell 2013) or new knowledge (e.g. cults, Collar 2013) connecting more people and places than before?

Like the Roman road network, the mobility of people, goods and ideas around the Roman world must play a critical part in any evaluation of Roman globalization. Currently, this raises more questions than answers, such as how representative are the data and how do levels of mobility compare to pre- and post-Roman periods? It is important to note, however, that such questions arise precisely because a globalization perspective demands that the evidence is examined comparatively, and at different spatial and temporal scales.

Here, roads and human mobility have been used to flag issues with the identification and characterization of Roman globalization. There is, however, an overarching question about the concept of globalization, ancient or modern: is globalization primarily a descriptive term or does it also offer explanatory power (Witcher 2015)?

Context and constraints

As a neutral descriptive term, globalization identifies characteristics (such as time–space compression and global consciousness) which may occur during any period but which demand period-specific explanation. In the contemporary world, these characteristics are explained via a package of technologies and concepts labelled 'globalism', including airliners, the internet and neoliberal economic policies. To explain Roman globalization, we need a similarly bespoke package of explanations.

A closely related issue concerns the confusion between cause and effect, or the symptoms of globalization and the processes that precipitate them. Did, for example, the construction of roads create connectivity, or were they built because connections already existed (see Hitchner 2012; Witcher in press)? Did human mobility lead to the sharing of new cultural ideas, or did shared Roman culture promote mobility? Even in the contemporary world, differentiating cause and effect is extraordinarily difficult and it may be more profitable to recognize such cause-and-effect relationships as recursive, that is, as ongoing processes.

A particular problem with Roman globalization is that it is sometimes treated – usually inadvertently – as an unprecedented process within the ancient world. This is especially the case in relation to the north-western provinces, where the Roman presence was late and the impact of integration faster and more dramatic. Even in the Mediterranean, however, concentration on the distinctive burst of cultural integration under the early Principate can lead to neglect of the long-term context, unintentionally implying that this globalization was somehow novel. There were, however, earlier globalizations. Indeed, scholars of early periods are more likely to see the Roman world as the *outcome* of the accelerating connectivity of the Hellenistic or Greek worlds (e.g. Sommer 2015). These earlier globalizations provide both historical and theoretical context. For example, in relation to Greek globalization, Vlassopoulos (2013: 21) outlines four intersecting Greek 'worlds' which operationalize the globalization concept and transform it from description into explanation: (1) the world of networks (the movement of peoples, goods, ideas and technology); (2) the world of *apoikiai* (the self-conscious creation of Greek communities away from home); (3) the Panhellenic world (the shared imaginary of literature and myth which linked Greeks together); and (4) the world of empires (the imperial strategies of the competing eastern Mediterranean empires).

Collectively, these 'worlds' explain the globalization of symbols, meanings, material culture, and identity (Vlassopoulos 2013: 19). The emergence of the Greek world during the first half of the first millennium BCE occurred on the 'impoverished periphery of a wider, older, richer and much more powerful world' focused in the East (Vlassopoulos 2013: 24). Five centuries later, Rome itself would emerge on the periphery of the Hellenistic or 'Greek' world. This, Vlassopoulos argues, was not Hellenization – the Romans did not become Greek – but rather a glocalization of Greek literature, art, mythology, iconography and religion used to define a distinctive Roman identity (2013: 280). The Carthaginians, Etruscans, Jews and other groups similarly glocalized Greek culture whilst maintaining their differences (on 'Hellenization' in the West, see Prag and Quinn 2013).

Having glocalized a version of Greek culture, Rome then used military power to appropriate a Mediterranean-wide network, which, by the Augustan period, consisted almost entirely of other glocalizations of Greek culture (Vlassopoulos 2013: 279–80). Hence, rather than a novel phenomenon, Roman globalization should be understood as a shift in the balance of established connectivities; Rome was a product of globalization. But it was also a driver; the pre-existing network did not extend into northwestern Europe, and here the violent extension of Roman power meant that Rome's version of Greek culture (*humanitas*, Woolf 2012: 226), was received rather differently. These 'outer provinces' (Terrenato 2008) experienced a more rapid and complete cultural transformation than the 'inner' Mediterranean provinces that had already glocalized Greek culture.

The four 'worlds' proposed by Vlassopoulos are intended to explain Greek globalization. They are not, therefore, directly suited to the explanation of Roman globalization for, despite substantial overlaps in time and space, there were important differences. Most obviously, the Greek world lacked a political and symbolic centre and was unable to deploy the military power fundamental to Roman expansion. But nor was Roman globalization identical to other specifically 'imperial globalizations'. For example, the success of the Achaemenid and Parthian empires lay in their ability to use existing local structures to support Persian interests; they did not impose a Persian cultural model but instead presented their empires in local terms; the Seleucid Empire was similarly organised (e.g. Vlassopolous 2013: 247; Kosmin 2014). In each case, elites were linked by courtly cultures focused on monumental architecture and portable art, but the wider populations shared little material culture. By comparison, the cultural transformation experienced across the Roman Empire was more pervasive, integrating a broader section of society and a wider variety of material culture. The Roman Empire still depended upon local power structures, but cultural transformation was more extensive. It is sufficient simply to compare the relatively distinct distributions of material culture found within the territory defined by the Roman frontiers with the absence of any similarly cohesive cultural packages with the boundaries of the Persian and Seleucid empires. This is not to suggest that Roman globalization involved cultural homogenization; on the contrary. But it is pertinent to note, in the context of all the research on cultural change and identity in the Roman Empire, the absence of analogous work on 'Persianization' or 'becoming Seleucid' or 'Sasanian'. In this comparative light, Roman globalization does indeed present something distinctive in need of explanation.

How then have archaeologists made use of globalization concepts to describe and explain the Roman world? One of the most frequently deployed models of globalization is that of Waters (1995). Studies by Pitts (2008), Sweetman (2007) and Witcher (2000) have all independently identified the same conceptual value in Waters' study and thus seem to represent a convergence on one specific model that may be particularly suitable. Waters (1995: 7–8) defines three arenas of social life: economy, polity and culture. Change in the organization of any one of these leads to change in all the others. Globalization centres on the relationship between these arenas in terms of exchange: material, political and symbolic. Each type of exchange has a specific relationship to space – material exchange ties social relations to localities; political exchange ties relations to extended territories, and symbolic exchange liberates these relationships from any spatial frame (Waters 1995: 9). All three forms of exchange co-exist, but any one may come to dominate. For example, culture and economy may become 'politicized' by excessive political influence, or economy and polity may become 'culturalized' through the dominance of symbolic exchange.

In Waters' model, economy concerns the social arrangements for the production, exchange, distribution and consumption of goods and services; material exchange therefore includes aspects such as trade and labour. Polity concerns the concentration and application of power, so political exchange includes coercion, force, authority and legitimacy. Finally, culture concerns the production, exchange and expression of symbols that shape meanings, beliefs, preferences and tastes – or more broadly, identities; thus symbolic exchange includes ritual, spectacle and propaganda (Waters 1995: 7–9).

Archaeology is well suited to the documentation of material exchange through, for example, amphorae, fineware, and shipwrecks. Certainly the scale and extent of this Roman material exchange was significant. But, unlike the modern world, there was limited scope for the development of regional specialization and mass consumption. Around the Mediterranean, no region had a particular advantage in terms of basic resources (apart from metals and some types of stone); prices and labour costs were scarcely different across the Empire (Scheidel 2009). Nor was there any significant new technology for reducing the cost of transport. In fact, much of the well-documented, long-distance material exchange was relatively short-lived or episodic and correlated with economic cycles, state intervention (supplying the armies and Rome), and the exchange of prestige goods rather than with wider consumer demand (Going 1992). In Waters' terms, this suggests that material exchange was politicized as the economy came under the dominance of the polity. The cost of moving large quantities of wine, oil and grain across the Mediterranean and up to the frontiers was high; this could be sustained by the state for political reasons – but not indefinitely. The widest distribution of Italian material culture across the Empire, for example, correlates with the expansive phase of Roman imperialism, not the stable Empire (Woolf 1992b). Similarly, Scheidel (2009: 70) has argued that the most significant phase of economic growth relates not to the stable first centuries CE but to the turbulent final centuries BCE. In other words, material exchange and economic growth were linked to imperial expansion; once the polity stopped growing, integration decreased and regional networks grew in significance.

Waters' model provides a framework for conceptualizing and linking the driving force of imperialism with the archaeological evidence for long-distance trade and exchange. Moreover, it underscores the significance of the so-called 'Augustan threshold' or 'Roman cultural revolution' (Doyle 1986; Wallace-Hadrill 2008), which replaced a form of globalization dependent on political and material exchange with one based on symbolism. In the Roman world, material exchange only seriously overcame the friction of distance when politicized; but symbolic exchange was able to extend much further afield. In the long-term, the Roman world was not globalized because of the scale of economic activity or the extent of its road network, but because of symbolic exchange.

Through a series of mechanisms such as bureaucratic procedures (e.g. paying taxes, census returns), official rituals (e.g. sacrificing to the emperor), coinage, and iconography, Rome forged an empire-wide community (Ando 2000). The symbolic focus was the idea of Rome embodied in the emperor. The nature of Roman globalization therefore shifted. The influence of political exchange over culture and economy during Rome's expansive phase reduced and, during the Principate, gave way to the culturalization of polity and economy – that is, symbolic exchange came to dominate material and political exchange. It is in this context that the issue of identities comes to the fore.

Similarly different: identities in the globalized Roman world

A defining characteristic of contemporary globalization is a consciousness of the wider world. This enhanced awareness of others heightens self-reflexivity with particular consequences for identity. Rather than cultural homogenization – a single global identity – globalization stimulates a proliferation of identities spanning from local to global (e.g. Giddens 1990). This emphasis on identity has been particularly attractive to archaeologists of the Roman period (see Mattingly 2010b). For most of the twentieth century, the dominant model of cultural change – Romanization – focused on an idealised 'Roman' identity and the degree to which provincial communities measured up against it. Over the past two decades, sustained critique of Romanization, by post-colonial archaeologists, has shifted emphasis onto the diversity of local and regional identities, deploying concepts such as hybridity and creolization (van Dommelen 2006; Webster 2001). The resulting mosaic of identities is richly rewarding, but also risks neglect of global trends.

A globalization approach incorporates both of these scales – the local and the global – and those scales in between, such as the region or province. Specifically, it develops the parallel concepts of the universalization of the particular and particularization of the universal. Hence, specific social, cultural or geographical identities can be universalized or globalized; subsequently, these identities are glocalized or adapted for local purposes. As a result, the cultural identity of the Roman world was characterized both by unity and diversity (Witcher 2000; Woolf 1992a). Critically, this means that the results of archaeological studies are highly sensitive to the scale of analysis. It is therefore vital to move between scales to understand the cultural and political character of the Roman world.

At the global scale, it is easy to be struck by the evidence for cultural convergence. For example, from Britain, to Spain, to Syria, cities were the basic unit of administration and local identity, characterized by their monumentality, division of public and private spaces, and the exclusion of the dead to the urban periphery. Finer-grained analysis, however, indicates differences: some cities were planned, others not; some were ancient, others newly founded. Even in the immediate hinterland of Rome, towns varied significantly, representing a particularization of a universal model (Keay and Millett 2016). Another example of urban particularization is provided by comparison of the public buildings in the cities of Italy and North Africa. Over the first three centuries CE, African cities demonstrated persistent emphasis on the construction of temples and honorific arches, whilst Italian cities gave more attention to monuments for spectacles, such as amphitheatres. These communities drew on the same universal model, but their choice of public buildings indicates particular priorities and expressions of identity (Laurence and Trifilò 2015: 108–10).

These examples suggest that a checklist approach to cultural change is insufficient. The presence of specific structures and objects is only part of the story; context and use are also important. As Nederveen Pieterse (2015: 234) cautions, it is important not to 'mistake the stage . . . for the performance' (see also Ando 2000: 210). Globalization is, and was, not so much about the acquisition of global material culture, but rather how it is used and the effects that it precipitates. Building a bathhouse was an empty gesture unless the furnaces were lit and appropriate bodily routines practiced (Woolf 2012: 225). Even then, these bathers did not spontaneously 'become Roman'; the construction and use of the bathhouse was a medium through which local and global identities were endlessly re-enacted. At the heart of Roman globalization, therefore, was the notion of doing similar things differently; it was a world structured by 'Roman differences' (Woolf 2012: 222). That Roman culture was constantly transformed, however, did not mean that to be Roman, or to assert Romanness, was meaningless. On the contrary, *romanitas* was a potent concept; but it was also slippery. Across the Roman Empire, declaring oneself to be 'Roman' may have been as simultaneously empowering and opaque as proclaiming oneself a 'global citizen' today; it asserted clearly defined rights and responsibilities, conformity and difference; it meant something highly specific and but also fundamentally vague.

In tension with this global 'Roman' identity, localizing tendencies proliferated (Whitmarsh 2010). Just as today, the simultaneous emergence of global and local identities was not coincidental and communities across the Roman world looked to the past to draw on, revive or invent, local identities. Alcock (2002: 178), for example, argues that the fascination with memory during the Roman period in the Greek East 'grew directly out of the conditions and pressures of empire'. This was not simple nostalgia, but a strategy for asserting status within a new political reality (Alcock 2002: 96–98). Local heritage was a valuable source of authentic, and unique, identity. For example, by Roman times, the city of Sardis (Turkey) had been occupied for a millennium and could boast a rich cultural heritage of Lydian, Greek and Persian influence. During the mid/late imperial period, a monument was erected at the city's sanctuary of Artemis, 'recycling' ancient sculptural pieces. Notably, the inhabitants of Roman Sardis did not select relics from those periods when the city shared in the globalizing cultures of Greece or Persia, but instead sought sculptures of eagles and royal lions from the city's politically independent and culturally distinctive days as the Lydian capital (see Rojas 2013; Vlassopoulos 2013). No matter that by the time the monument was assembled, no one could understand the Lydian part of the bilingual inscription on one of the statue bases; the monument made a prominent statement about civic identity, past and present.

Interest in tradition was a strategy to create stability in a world-in-flux through 'new' locally meaningful identities. A concurrent trend of globalization is the de-anchoring of such place-bound identities and their wider circulation (Woolf 2012: 228). This mobility of local identities might take the form of either people or ideas (e.g. Palmyrene merchants, the Jewish diaspora, Egyptian cults, Smith 2013: 150–73; Collar 2013: 146–223; Versluys 2010). Imperial globalization was central to this form of mobility. The Roman state moved people from one part of the Empire to another, as punishment or reward, or for strategic purposes. Through wars, the state enslaved and relocated entire populations; through the military, it enlisted ethnic groups from one province and posted them to another. In turn, these movements could both consolidate cultural identities and establish networks through which other ideas could flow. For example, the Batavians of the Rhine Delta were recruited as auxiliary units and deployed elsewhere along the frontier. Military service exposed these soldiers to Roman culture, aspects of which were assimilated and shared with wider Batavian society back home; evidence of writing equipment from rural sites may indicate the importance of literacy in communication between the Batavian homeland and the soldiers posted abroad (Derks and Roymans 2006). Drawn into the globalized Roman world, the Batavians did not simply become Roman (or Romanized); indeed, military recruitment may have enhanced the martial ideology of traditional Batavian society.

The military network around the frontiers was particularly significant in terms of the globalization of ideas. For example, Collar (2013) has demonstrated the centrality of the military in the universalization of particular cults, such as Jupiter Dolichenus, which expanded rapidly from a local cult in northern Syria during the first century CE to a widespread cult across the frontier provinces by the third century. These military networks, directly or indirectly mobilized a host of other cultural groups and ideas: Palmyrene auxiliaries took their gods to Dacia, North African soldiers put up inscriptions in Britain, and Frisian units made use of traditional pottery when posted to Hadrian's Wall (Eckardt 2014: 63–91; Smith 2013: 165–68; Wilmott *et al.* 2009: 273–75).

On the frontiers, the presence of literate soldiers, bureaucrats and merchants, all living far from home, perhaps explains the wealth of evidence, especially epigraphic, with which to explore identities. But how can the less impressive evidence from provincial, and especially rural, landscapes be understood in terms of Roman globalization? After all, the vast majority of the empire's population remained rural and, as today, rural populations were not immune from globalization – indeed, the costs are usually borne by rural communities, whether in terms of the loss of land, higher rents, or environmental degradation. This situation was all the more marked in pre-industrial times, when the majority of wealth was directly or indirectly extracted from rural landscapes. Two very different urban hinterlands in Roman Britain illustrate the possibilities (Gaffney *et al.* 2007; Perring and Pitts 2013). High-status rural settlements around Camulodunum (Colchester) made significant use of Roman pottery, particularly fineware vessels for eating and drinking, reflecting practices that drew on Roman culture. In contrast, the territory around Viroconium (Wroxeter) made very limited use of Roman – or indeed, any – pottery. Perring and Pitts (2013: 250) argue that this difference was not the result of two different responses to Roman control, examples of successful and failed Romanization respectively, but rather a continuity of pre-existing trends. Around Camulodunum, a century of Gallo-British culture had paved the way for Roman styles of consumption; around Viroconium, there was no such priming and hence no analogical resonance with Roman culture. The unevenness of the Romano-British countryside reflects its pre-Roman character – in effect, these were 'Iron Age' landscapes.

From a globalization perspective, the situation looks different. Pre-existing structures always shape responses to globalization, but even areas that cannot, or choose not, to connect are transformed. Globalization crystallizes or exaggerates existing trends; there is never simple continuity because the local is redefined through reference to the global (Woods 2007: 489, 500). Hence, in the hinterland of Viroconium, we do not see simple persistence of an Iron Age way of life because the lack of consumption by rural populations during the Roman period was now referenced against a different baseline, most obviously the urban lifestyles at the new city of Viroconium. These rural populations may not have used Roman material culture, but their identities and lifestyles were profoundly shaped by Roman globalization (see Witcher in press).

Elsewhere, other populations may have found no alternative but to make use of Roman material culture. Drawing on the concept of 'network power', Morley (2015: 62–64) has suggested that for many the cost of remaining outside the Roman network may have been too high – socially, economically or politically. Over time, adoption was less a matter of choice than necessity. For example, anyone putting up an inscription in the Roman West would have found it almost impossible to choose any language other than Latin. It had no intrinsic superiority, it was simply the language backed by the network. But the situation was different in the Greek East because there the Greek language was embedded within a well-established network – there was little cost to ignoring Latin.

Significantly, effects such as these did not require Rome to intrude systematically into the everyday lives of its subjects. Indeed, like other ancient states, Rome lacked the ability to do so routinely or universally (see Bayly 2004 on pre-modern empires). Instead it relied primarily on local elites who were drawn into an imperial community of shared interests and structured competition (Ando 2000; Scheidel 2013: 28). It was through these elites that imperial ideology and provincial loyalty were negotiated and it is therefore no surprise that when rebellions did occur (e.g. Social War, Gallic Empire, Palmyran Empire) these were not so much challenges against the Roman system as struggles for dominance within it (see Tomlinson 2003: 275). Like globalization today, Roman globalization made it difficult to articulate any alternative. It was a competitive ideology, well aligned with the interests of a small elite, but with sufficient promise of opportunity such that a wider section of society saw possibilities; others were drawn in whether they liked it or not. It was flexible enough that it could evolve, diverging in ways that strained at the notion of unity and yet it could retain a sense of consensus and coherence. Moreover, it articulated a powerful counter-narrative of barbarism against which to promote the merits of its self-declared superiority.

The future of the globalized Roman world

Across large parts of Europe, south-west Asia and North Africa, the archaeological record documents a distinct Roman 'event horizon'. Compared to earlier and subsequent periods, the Roman world is often disproportionately visible, whether measured in terms of urbanism, rural settlement, population, agricultural production, shipwrecks, coinage, inscriptions, pottery or roof tiles. The scale and nature of this archaeological evidence, shaped by universalizing concepts drawn from Roman texts, reinforce the notion of the Roman period as an unprecedented example of ancient globalization. This chapter has raised a number of reasons for caution about accepting this evidence at face value. The Roman world was undoubtedly globalized, but it was not unique and we need better ways of contextualizing and indexing Roman globalization in relation to other ancient cultures and empires. Network studies, in particular, offer important theoretical and methodological frameworks within which to improve understanding.

The richness of this archaeological 'event horizon' also means that we are drowning in data (Perring and Pitts 2013: xviii). This is a very different problem from the study of other ancient societies and, in itself, signifies something distinctive about the Roman world. But if we continue to explain this difference in terms of the dominant interpretive paradigm of 'Romanization', we will fail to understand how this situation came about. Moreover, we might legitimately ask, why excavate yet more Roman sites that confirm what we think we already know? Globalization offers renewed purpose. Rather than working top-down, centre-out, measuring individual sites against an idealized model (i.e. Romanization), a network approach encourages consideration of sites as unique glocalizations demonstrating and explaining how people across enormous expanses of time and space connected together to form the globalized Roman world.

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7.5

The rise and fall of empires in the Islamic Mediterranean (600–1600 CE)

Political change, the economy and material culture

Petra M. Sijpesteijn

Long-distance networks in the post-Roman Mediterranean

From the 560s CE the influx of various goods from South Asia, Arabia and Africa traded via the Middle East across the Mediterranean into north-western Europe, especially in the areas bordering the Mediterranean, increased in variety and volume. Red garnets, amethyst beads and spices from Sri Lanka and India, incense from Arabia and cowrie shells from the Red Sea, ivory from Africa, as well as fine ceramics, such as North African and Phocaean red slip ware, amphorae and their contents (olive oil and wine from Palestine and Syria), '*mille fiori*' beads and bronze vessels from Egypt and *meerschaum*, glass, silver objects, and textiles from the eastern Mediterranean circulated in large quantities, reaching a peak in around 600 CE (Drauschke 2011; Dixneuf 2011; McCormick 2001). These imported goods were found in all social layers and their use was widespread. Most products that originated from further afield seem to have arrived as finished or half-fabricated products, but some jewellery and decorative objects were produced in the Byzantine empire and then traded across the Mediterranean. Conversely, products produced in the Mediterranean found their way to the far extremities of these networks, albeit in much smaller numbers. The intensive trade, often extending over long distances, was the basis for the economic expansion and specialised production in the eastern Mediterranean that continued into the seventh century (Ward-Perkins 2001; Vroom 2014).

The integrated global system was, however, also vulnerable, with changes at one end of the global network effecting local conditions. Soon after 600 CE the long-distance trade networks connecting western Europe via the Mediterranean with South Asia were disrupted, effecting the material repertoire in the Mediterranean. Ceramics production in the western Mediterranean diminished. Red garnets, so abundantly represented in Merovingian graves in the sixth century, were replaced by Bohemian garnets or glass. Other products imported from beyond the Mediterranean, but also those originating from the eastern Mediterranean, continue to be found in Europe throughout the seventh and eighth centuries, but in much smaller quantities and in less places (Drauschke 2011), with diplomacy and gift-giving between ruling elites replacing bulk trade as a mechanism to spread imports (Ward-Perkins 2001). Palestinian wine amphorae penetrated less deeply into European lands, lingering in coastal cities and diminishing in absolute numbers. Egyptian port cities on the Red Sea, whose flourishing during the Roman period was mainly based on long-distance trade via the Indian Ocean with South Asia, show a steep decline from the late sixth century onwards (Power 2012; Morony 2004).

These changes resulted from local *and* global political and economic developments. Most of western Europe as well as the North African Roman provinces witnessed a steady decline with less complex, more localised economies from the fourth century onwards (See Fischer 2011: 186–91 for an overview). While this was a long-term process set in motion by the new socio-political constellations that arose in the aftermath of Roman rule, sixth-century natural and man-made disasters had a direct impact as well. The long-term effects of the Justinian plague continue to be debated, but the temporary net result certainly was a declining market for luxury products from overseas (Sarris 2002; Kennedy 2007; Wickham 2005, *pace* Morrisson and Sodini 2002). The long-raging war between the Sasanian and Byzantine empires impacted economic activity, but did not result in decline per se (Ward-Perkins 2001; Fischer 2011). In fact, it has been argued that the Sasanian and Arab conquests were expressions of an expanding economy on their side, while, conversely, the Byzantine military losses were related to economic stress (Morony 2004).

At the other end of the material supply route, Sri Lanka witnessed political and economic disruption around this time due to dynastic struggles and invasions from the mainland. Shortly before, the Gupta dynasty (*c.*320–550 CE) and thereby India's so-called 'Golden Age' had come to an end, heralding a period of rule by many smaller kingdoms. Local markets, commercial activities extending from the area, and thus the volume and diversity of goods on offer beyond were affected.

Simultaneously Sasanian trade activities expanded. Economic exchange with China increased via central Asia, with an important role for Sogdian traders in the overland routes, while Sasanian merchants virtually monopolised trade in the Indian Ocean (De la Vaissière 2005; Morony 2004; Daryaee 2003). The sharp drop of Byzantine coins found in Southeast Asia also suggests that the role of Byzantine traders was taken over by Sasanian middlemen (Morony 2004; Morrisson and Sodini 2002). The occupation of Yemen in 570 CE put the Sasanians in control of the trade networks that extended from the Indian Ocean across the Red Sea to Egypt and the African coast. It is unclear to what extent the Sasanians exerted an active undermining economic policy of Indian Ocean ports to stimulate the use of overland routes across Sasanian territories, but clearly trade activities in the Red Sea diminished in this period.

The eastern Mediterranean, especially at its southern borders, but including the Aegean and, to a certain extent, West Asia, boasted a vital local economy throughout this period (Ward-Perkins 2001). Constantinople 'Glazed White Wares' were exported regionally to the Aegean and Cyprus and beyond to the shores of the Black Sea, Italy, and as far as Scandinavia and Russia (Vroom 2014). Among the relics that reached Sens in France in the last quarter of the seventh century originating from beyond Gaul, those from eastern Mediterranean origin loomed large (McCormick 2001). Byzantine products also continued to find their way into Arabia, East and South Asia (Mango 2009; Decker 2009a; Kinoshita 2009; Thierry and Morrisson 1994).

When imports declined as an effect of Sasanian trade policies or a disrupted market in the Indian Ocean, the unremitting Byzantine demand was supplied by locally produced luxury goods which increasingly moved into western Europe. Byzantine sericulture expanded in response to local demand and benefited from Chinese techniques. Sumptuary laws accompanying the introduction of silk restricted the use of the precious fabric, as it did in the Chinese empire (Sijpesteijn 2004).

Other areas, too, showed unfailing demand, which resulted in a new material repertoire. In Egypt, from the end of the sixth and into the seventh century, locally produced luxury ceramics replaced imports from Mediterranean pottery production centres (especially on Cyprus and in Tunisia), presumably because those were no longer available (Morrison and Sodini 2002; Ward-Perkins 2001; Dixneuf 2011; McCormick 2001). That the Egyptian internal market continued to demand (foreign) luxury goods is also evident from the great number of high-quality Sasanian and Byzantine silks found in cemeteries (Power 2012). Egyptian products seem also to have been imported in greater quantities to Europe in the seventh century. Egyptian produced bronze vessels are frequently encountered in Merovingian graves (Drauschke 2011). Other Egyptian objects also made their way into Europe, as the small Egyptian scales set found in Flanders shows (Bostraeten 1965).

Political and resulting economic realities crucially influenced the availability and stylistic diversity of objects, but local preferences and tastes also played a role. While Merovingian grave finds show a shift from red garnets of Southeast Asian provenance to Bohemian garnets, red garnets found on the British isles and in Scandinavia suggest imports from Sri Lanka and India might have been redirected there. Similarly, amethysts from India continue to be attested in European contexts (Drauschke 2011). Palestinian wines were popular all over the Mediterranean, but there are also clear indications that officials taking up posts elsewhere had an impact on the voluminous wine trade across the Mediterranean and beyond (Decker 2009a).

Muslim convergence and the creation of a new economic realm

The Mediterranean was not central to globalisation in the Muslim empire with its focus further east, but the area experienced the impact of the intensive exchange networks tying the Atlantic Ocean to the Indian subcontinent and the Mediterranean with Africa and Arabia into one culturally entangled universum.

Arabia was well connected to West Asian networks, as is shown by numerous inscriptions as well as the sixth-century Greek papyri from Petra (Frösén *et al.* 1998, Koenen *et al.* 2013, Arjava *et al.* 2011; Macdonald 2010). Emphasis should be placed on the role of the Christian Arab Ghassanids of north-western Arabia, who were fully integrated administratively, culturally and linguistically in the Byzantine empire where they served as military clients controlling the desert borders, but whose contacts via pilgrimage, trade and political alliances extended deep into the peninsula (Fischer 2011). Their mixed orientation was expressed in buildings decorated with Greek and Nabatean/Arabic inscriptions and their function as legal authorities for the local population producing Greek–Arabic legal documents (Kaimio 2001). Arab traders were also familiar with the Levant, where they travelled on commercial missions and owned landed properties.

The Arab conquests of the seventh and eighth centuries had, for the first time, united the entire area stretching from the Pyrenees to the Oxus River under a single political authority lasting for three centuries. As part of an integrated political and economic zone, the exchange of people, goods and ideas within the Muslim empire received a tremendous stimulus. The resulting legal, economic and cultural integration continued beyond the political break-up of the Muslim empire in the ninth century, linking vast areas through shared patterns without defying regional diversity. Within this Muslim empire a global system was in place, but the intra-cultural zone of connectivity extended even beyond.

In the absence of evidence of large-scale destructive battles and sieges, life seems to have continued in the lands taken over by the Arabs more or less uninterrupted. Local personnel retained their positions, except those in the highest functions. There are no indications of large-scale appropriations of land by the conquerors. Rather, taxes collected on the lands were redistributed amongst the conquerors. However, this overwhelming impression of continuity belies a number of significant adjustments. These are most clearly visible in the Egyptian papyrological material, but they can be observed elsewhere as well (Sijpesteijn 2013; Morelli 2010).

A new administrative practice was introduced in the whole Muslim empire showing a clear break with local routines. In fact, certain features point to an administrative and cultural *koine* in use amongst the Arab Christian tribes – the Ghassanids and Lakhmids discussed above – in West Asia that spread with the Arab conquerors (Sijpesteijn 2013). This 'Arab' administrative tradition can be traced in documents from al-Andalus and Egypt to Khurasan and Sogdiana. Besides new terminology and technical expressions, innovative ways of authenticating documents appeared. In some texts the bottom part is folded to contain a summary of the most important elements of the document, closed off with a seal. This custom, although prevalent in earlier centuries in the Near East, was no longer practised in the area but was reintroduced by the Arabs. The seals used at this time by Arab officials show a range of patterns, including Byzantine models with animal and human figures and abstract forms such as stars and crescents. The Arab conquests thus resulted in the distribution and (re)introduction of Byzantine motifs and practices in large parts of the Mediterranean and beyond. Only from the early eighth century onwards seals using Arabic writing became common as part of empire-wide Islamicising and Arabicising reforms leading also to non-figurative coins (Sijpesteijn 2012).

In other terrains, too, the Arab takeover led to immediate changes in local consumption patterns and material expressions. These were the result of the creation of one large commercial zone where the free movement of objects and people led to new expressions, and, seemingly, of the conquerors' established social habits and consumer preferences. Besides pay, the Arab conquerors supplied their armies and government officials with contributions in kind, paid by the local population as part of their taxes. This system, although also practised under the Byzantines, was greatly extended by the Arabs to include a more diverse array of goods as well as a more intense deployment of human capital (corvée-labour) (Sijpesteijn 2013). The decision not to give the Arab troops lands in the areas they conquered, but rather a salary paid out of the taxes, similarly had an immense impact on local consumption and production patterns (Kennedy 2002). Arab soldiers who spent their salaries on maintenance, food and housing stimulated economic exchanges in a money economy and contributed to the development of new stylistic and formalistic expressions. Such interventions by the Arabs in the economic organisation of the conquered areas were hugely important for the spread and meaning of specific forms of material culture.

Novel, too, was the large-scale consumption of butter (as opposed to oil), milk, sheep and goats, suggestive of a 'nomadic' taste (see examples in Grohmann 1952; Bell 1910). A change in forms of ceramics has also been attributed to the introduction of new dietary customs by the conquerors (Bulliet 1976). The interruption of Egyptian wheat transports to feed the Byzantine capital, led to a shift in agricultural patterns in Anatolia, where, under state pressure, large parts of the area were dedicated to grain production in the course of the seventh century (Haldon 2016). The loss of the hugely rich provinces in the east made interaction with the northern and western regions more important, redirecting material flows and patterns of interaction. The Arabs meanwhile, redirected part of Egypt's wheat to Medina, and later Damascus and Baghdad establishing new transport networks and nodes of exchange. Such redirection of product flows from the Mediterranean to Arabia, the Levant and Mesopotamia resulted in new patterns of interaction and exchange, with repercussions for consumption patterns, the development of waterways, harbours, routes, seaboard vessels and commercial consolidations at a local and domestic as well as an urban and trans-regional level (Feinman this volume).

Documentary evidence, archaeological sources and literary references point to a continuous or even increased production and consumption of wine, involving also the caliphal household. Palestinian viticulture expanded and the surge in amphorae in Egypt in the seventh to eighth centuries suggests that the Arab conquerors also brought their taste in Palestinian wine with them (Avni 2014; Dixneuf 2011). Evidence also comes from agricultural contracts and the development of a special genre of Arabic wine poetry. Legislation limiting the production of wine and pork ascribed to caliph ʻUmar II (r.717–720 CE) on the other hand, is most certainly a product of the ninth century when, due to an increase in conversion, interaction between Muslims and non-Muslims became more explicitly belligerent.

While the effects on agricultural production and the introduction of new crops into the Mediterranean under the Arabs is now generally considered to have been more modest than the claim of a ‘green revolution’ suggests, investments in irrigation systems, soil and crop amelioration, and the development of land by the new rulers led from the eighth century to increased agricultural output and the spread of crops across the Muslim empire (Watson 1983 with Decker 2009b; Morony 2004). Trade benefited from a single legal, economic and political system, while Islamic law was exceptionally beneficial to and well integrated with commercial initiatives. Jews who had been excluded from certain professions in the Byzantine empire moved to the Muslim realm where no such restrictions existed. Other artisans were attracted by the economic opportunities the Muslim empire offered. Contributing to a flourishing trade economy their networks extended across the Mediterranean, while their participation in multiple cultural spheres led to new material forms. Obtaining new economic identities in trade and pilgrimage to Arabia, Red Sea ports expanded again (Power 2012; Morony 2004).

A shared cosmopolitan Muslim culture

Intense interactions forming dense networks widely diffused knowledge and praxis throughout the Muslim world at a global scale, its cultural and social impact extending beyond the borders of the empire (confirming with Jennings’ first criteria of globalisation). The carriers were soldiers, political appointees, scholars, refugees, merchants, missionaries, pilgrims and other temporary and permanent migrants, but also the objects, letters and books sent from one part of the empire to the other. This exchange of artistic motives and techniques, governmental principles and practice, religious and legal concepts led to a shared ‘Muslim’ material culture from the ninth century onwards. The process started already under the Umayyads (661–750 CE), but the impact of the newly founded Abbasid capital Baghdad (750–1258 CE), because of its economic and subsequent cultural and scientific achievements, as well as its location in the Sasanian realm, was crucial. Flourishing agriculture and trade provided the means to implement the insights and expertise available, leading to a period of Muslim power and high civilisation impacting the Mediterranean and beyond.

Large infrastructure projects executed under the Umayyads and Abbasids spurred demands and stimulated artistic and technical innovations locally, as well as across regions. Documents record the large amounts of material and personnel demanded for the building of Egypt’s newly founded capital Fustat (Morelli 2010). As a vibrant and cultural centre, the city attracted many migrants and became the regional focus for urban development and material culture (Avni 2014). Other towns established for the Arab troops had similar effects, as did the development of commercial urban centres (Morony 1995). In already existing cities, mosques, palaces and public buildings – such as markets – were built (Morelli 2010; Bell 1910; Daniel 1979). Bringing

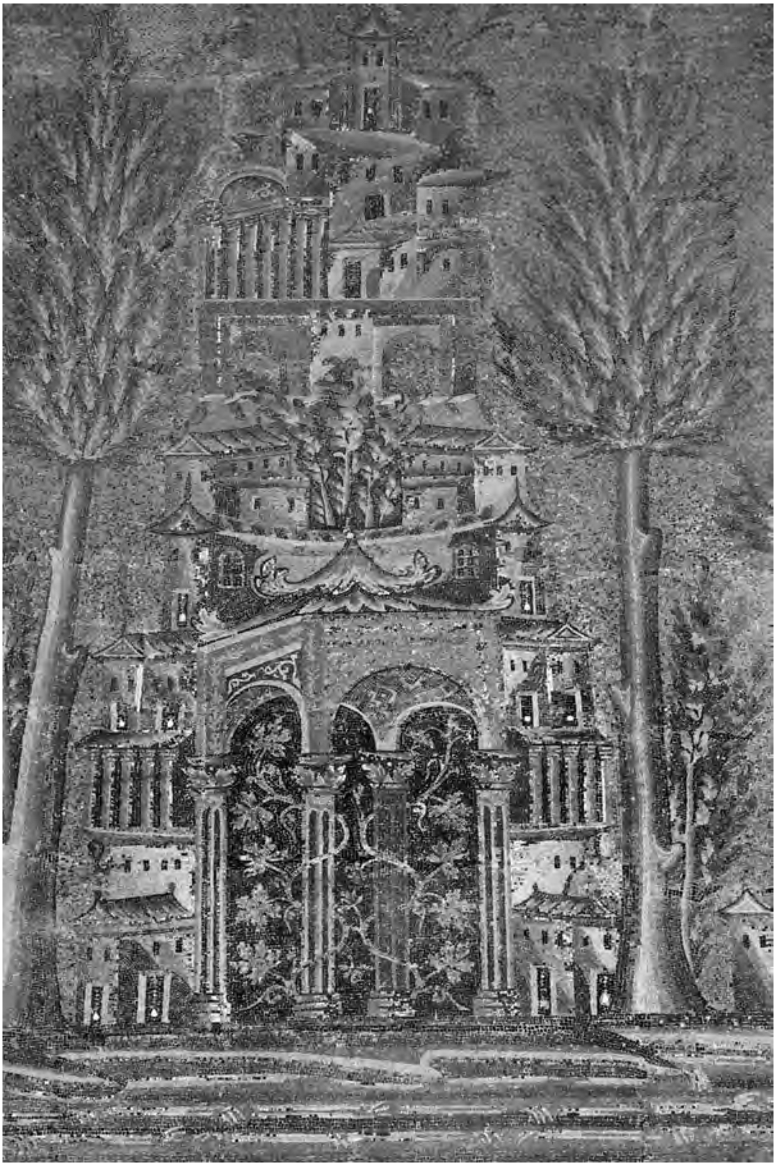

Figure 7.5.1 Mosaics on the outside walls of the Umayyad mosque, Damascus, contributed to by Byzantine artisans. c.715 CE. © John Wreford Middle East Photography.

together artists, materials, designs and patrons from all over the Muslim empire and beyond, the buildings exhibit multiple influences, with pre-Islamic forms undergoing the gradual introduction of new patterns and techniques (Figure 7.5.1). The resulting local urban styles extended beyond architectural features to other expressions of material culture, such as ceramics (Morony 1995; Bulliet 1976). These were great launching pads for a more cosmopolitan Muslim style, which can be identified from the ninth century. Identifiable regional forms and styles continued to adapt to local needs and tastes (Grabar 1987; cf. Jennings, Feinman this volume).

The production and circulation of textiles increased explosively as cloth became an important expression of cultural and social affiliation (Sijpesteijn 2004). Silk and silk embroidery, the most prized, continued to be imported via very important local markets in central Asia and sea-based routes. Silk was also produced locally in the Byzantine empire from the late sixth century onwards, and later in new production centres that were set up in North Africa, Sicily and especially al-Andalus. Relatively light, but hugely admired and valuable, richly embroidered, multi-coloured garments, rugs and other cloths could be traded over long distances. Other materials, such as linen, cotton and wool, sometimes combined with silk, were also common. Byzantine and Asian designs were combined with new motifs and patterns, most noticeably geometric decorations and writing, to create a new Muslim form. Technical innovations occurred as well, for example when new stiches were introduced to decorate linen garments with woollen embroidery under the influence of embroidery techniques practiced further east on silks (Sijpesteijn 2004). In its most famous expression, *tiraz*, the silk embroidered bands with writing decorating the sleeves of garments and sashes of turbans, embellished robes of honour, which were presented as rewards and exchanged as diplomatic gifts. *Tiraz* bands were not only exported to the non-Muslim world, but produced there as well, showing how the presence of 'Muslim' objects impacted local taste in the northern Mediterranean (Versluys this volume). The coronation mantle of Roger II (r.1130–1154 CE), including the band of Arabic writing, was made in the Sicilian Norman royal factories (Figure 7.5.2) (Johns 2003).

Administrative and legal documentary practices travelled across the empire by moving personnel and through handbooks and documents, and could travel great distances. A nodal reorientation took place here as well (Feinman this volume), with the influence of Sasanian governmental and court practice looming especially large in secretarial practice, palaeographic innovations, and theories about kingship and authority that circulated amongst provincial ruling centres (Frantz-Murphy 2007).

Contact with the world beyond the Muslim empire continued in the East and West. Overland routes via central Asia continued to be important. Arab coins found in China and India indicate that Indian Ocean networks remained active as well. The formidable economic

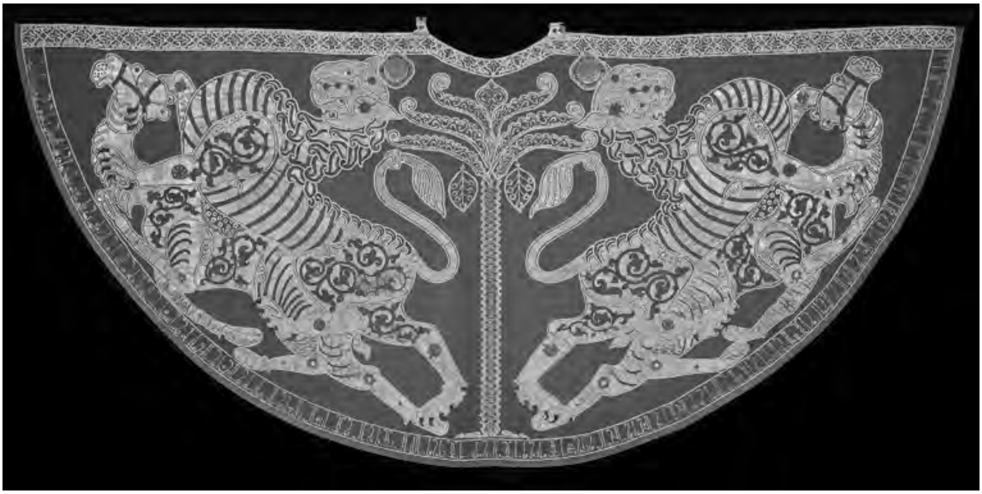

Figure 7.5.2 *Tiraz* on the coronation gown of Roger II, 1133-34 CE. © KHM-Museumsverband Wien. Object SK XIII 14

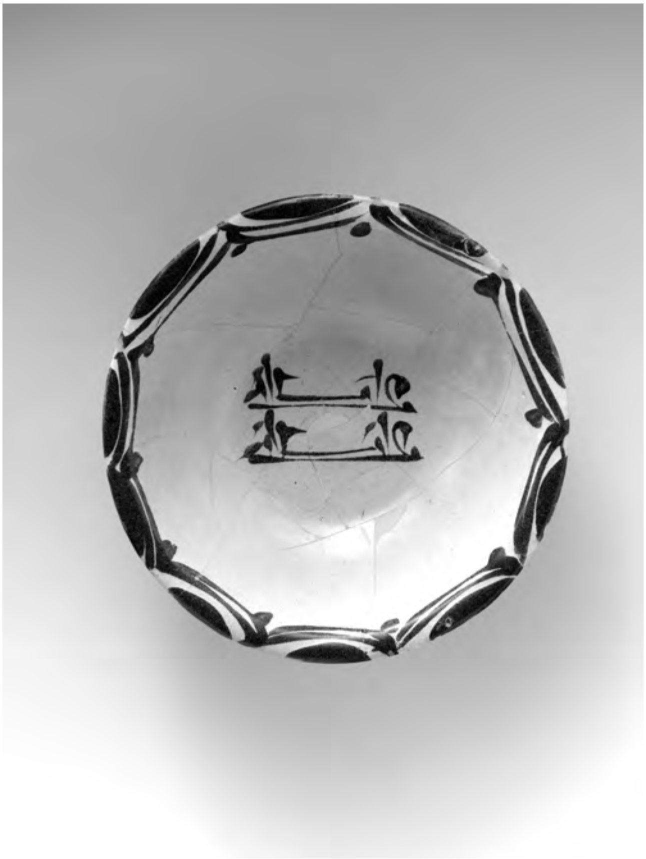

Figure 7.5.3 Iraqi so-called imitation Chinese bowl with Arabic inscription, ninth century CE. © The Metropolitan Museum of Art, www.metmuseum.org. Object 63.159.4

demand of Tang and Sung China was met by West Asian commercial interests. Ties across the Mediterranean have left material and non-material traces. Until the reforms in the early eighth century, coins with 'Byzantine' imagery were produced in Constantinople for export to the Muslim lands. Christian communities in the Muslim empire continued to maintain relations with the Byzantine empire and theological developments in the two realms remained intertwined.

The Mediterranean economic centre of gravity, however, had moved westwards with an increasingly important role for Egyptian traders and the main commercial artery extending along the Maghribi coast from Alexandria to the Iberian Peninsula, including Tunis and Sicily (Constable 1996). From the North African coasts, Muslim traders penetrated into Africa in search of slaves and gold, while trade posts were established on the east African Red Sea coast in the ninth century. Within the Muslim empire, with its booming economy raising demands for luxury products and its vast dimensions, objects travelled faster and further. This can be elucidated through the example of the introduction of porcelain in the Muslim empire. Chinese porcelain arrived in the Muslim empire in the seventh century, motivating the development of new glazing techniques to produce Chinese imitations that were then also exported to Europe

(Mango 2009). In fact, it was Muslim potters who added cobalt blue decorations into the white glaze which, adopted by Chinese potters, developed into the iconic Chinese blue and white ceramics. Conversely, local decorations and patterns were applied to the new blue and white-style earthenware, such as Arabic writings (Figure 7.5.3).

From China to Spain: the Mediterranean in a world trade network

Increased mobility and connectivity within the Muslim empire coincided with a rise in economic and political activities across the Mediterranean from the eighth century. Linking the Mediterranean via the Middle East to the Indian Ocean, a global, intra-cultural zone was eventually formed of inter-societal networks.

The gold coins found in northern Italy from the ninth century onwards, point to intensifying contacts with or via Egypt and the Levant, while the silver dirhams, mostly found in Scandinavia, originate in the eastern Muslim empire (McCormick 2001). Pottery finds in Greece confirm this orientation in connections with the Muslim world.

Italian city states, especially Venice, Pisa and Genoa, expanded their commercial operations in the Mediterranean, while the Byzantine capital, still a major urban centre and the main focus of Italian commercial activities, benefited as well (Jacoby 2009). New markets and economic players further stimulated the Mediterranean reorientation towards its northern shores (Wickham 2005). In the east, sea-lanes linked the western Aegean to Constantinople and the Black Sea region, and reached into the Levant (Vroom 2014). Direct long-distance sea routes were established between Venice and the Muslim Mediterranean from Morocco to Palestine (McCormick 2001).

The rise in economic activity in the eastern Mediterranean can be traced in the production and trade of Byzantine ceramics. New pottery workshops were established, where styles, shapes and decoration techniques were experimented with. This resulted in the so-called incised or painted sgraffito decorated ceramics (Vroom forthcoming). Still, commerce was limited overall to regional activities, with merchandise being traded in small ships that moved along the coasts and established links locally, sometimes extending between coastal cities.

On the other side of the Mediterranean, a new force in the form of the Shi'ite Fatimid dynasty had taken over Egypt in 969 CE. Building on Egypt's agricultural wealth and its central position in African and Red Sea networks, the Fatimids also benefited from the preceding century of Egyptian semi-independence during which surpluses had been mostly invested locally, rather than remitted to Baghdad. Investments in sugar cane and flax cultivation benefited the export market. Fatimid political control extended from Syria into western Arabia, but its commercial influence reached much further, via a web of merchants' networks that also benefited from an active Isma'ili missionary movement (Tsugitaka 2004; Mango 2009). With Byzantine expansion, Egypt became the most important Muslim harbour in the east Mediterranean. The Egyptian view on the Mediterranean commercial zone as almost exclusively consisting of its eastern half is beautifully illustrated by the maps of coasts, islands and seaside towns in the late eleventh-century *Book of curiosities* (Rapoport 2010). Navigational and legal instruments developed in the Muslim world were exported to other economic zones. The *commenda* partnerships - a legal instrument developed in Muslim law - stimulated capital investments and were the motor behind the commercial success of the Italian city states (Udovitch 1970). Egypt was more than a transfer market and producer for export, as the popularity of Byzantine brocades and furniture amongst Egyptian (Jewish) brides shows (Mango 2009). Venice, quick to recognise the economic potential of this trading partner, became the first European power to forge commercial relations with Fatimid Egypt.

An increase in shipwrecks from the tenth- to eleventh-century eastern Mediterranean points to an intensifying maritime trade and contacts that reached across the Mediterranean. Crossing the Mediterranean, picking up and delivering goods in ports as they progressed, these ships carried the sum of Mediterranean material production (McCormick 2001; Abu Lughod 1989). Ceramics produced in Byzantine workshops were disseminated wider, penetrating further inland in greater numbers. The trade in luxury ceramics increased, with glazed pottery wares taking over from amphorae as the major cargo by the twelfth century. From this period, Islamic pottery – mostly imported from Egypt and Syria – is also attested on Byzantine sites, albeit at first in small numbers (Vroom forthcoming). Whether inspired by objects or introduced by artisans from the Muslim world, pseudo Kufic, arabesque ornaments, birds, fantastic creatures and court scenes, all clearly of Muslim background, started to appear on Byzantine ceramics. The Norman conquest of Sicily in the mid-eleventh century, and its inclusion in the larger Christian realm, had a major influence on Byzantine pottery shapes and decoration. At the same time, connections between Sicily and the Muslim world remained strong. Painters, masons and architects from Fatimid Egypt were commissioned to decorate the Norman kings' palaces and religious foundations. The close similarities between the administrations of these two countries can only be explained through direct influence (Johns 2003). Venice, the main interface with the Muslim world, imported spices, soap, textiles and carpets (cotton, silk, velvet), illustrated manuscripts and gilded bookbindings, (inlaid) metal work, glass, ceramics and porcelain from the Middle East. The production of outright imitations and the appearance of eclectic forms shows the indelible impression that these superior Middle Eastern goods made – from the presence of Arabic words in the Venetian dialect to architectural influences on some of the most famous buildings in the city, such as the San Marco basilica (Mack 2002; Howard 2000).

In the eleventh century, Italian city states expanded their position by obtaining commercial privileges in Muslim and Byzantine ports. With Venetian and Genoese control extending over islands in the Aegean, the competition with Constantinople increased and came to a climax with the Venetian conquest of the city in the Fourth Crusade. Venice gained de facto control of trade in the eastern Mediterranean, the Aegean and the Black Sea region (Abu Lughod 1989).

By the end of the thirteenth century, not only the Iberian Peninsula, but the whole Mediterranean had decisively moved into the European commercial zone (Abu Lughod 1989; Constable 1996). The main sea route moved north along the islands in hands of the Christians, while Spanish and Italian traders practically controlled trade in Egyptian ports as well (Constable 1996: 241, 249; Tsugitaka 2004).

Meanwhile, possibly motivated by the Mongol advance in the east, trade via the Red Sea flourished, with Egypt, having turned away from the Mediterranean in the face of European expansion, as the main beneficiary. Egyptian trade emporia extended via the Yemen into Southeast Asia (Chauduri 1990; Constable 1996). Other routes via central Asia and the Persian Gulf similarly saw increased activity. Mongol authority, extending from China through central Asia into eastern Europe and western Asia, and the safety and reliability for traders that it guaranteed, contributed to the success of the Indian Ocean trade. This commercial network linking the Mediterranean via the Eurasian land mass, the Red Sea and the Persian Gulf to the Indian Ocean, in which a multitude of interdependent political and mercantile players participated, has rightly been called an economic world system (Abu Lughod 1989).

Again, ceramic finds can help us trace the effects of this commercial reconfiguration on material production in the Mediterranean. The high production and consumption around the Mediterranean intensified circulation within the Mediterranean from east to west and beyond, with West and South(east) Asia. Increased output for a mass market was produced in newly proliferating pottery workshops. The geometric and stylised floral styles that became popular across the Mediterranean suggest Islamic influence. Technical innovations, such as the tripod stilts separating vertically stacked pots that allowed for more objects to be baked at once, or the clay pins stuck in the wall of the kiln to hang vessels on for firing, also arrived from Asia via the Middle East (Vroom forthcoming). Chinese porcelain production relied on a steady supply of Persian cobalt (known in Chinese as 'Islamic blue'), which even with the exploitation of local Chinese finds continued to be the most prized kind. Islamic patterns influenced Chinese potters, whose work was exported throughout the Muslim world from Southeast Asia to Iraq. Eastern forms subsequently appear on so-called imitation blue and white ceramics produced in the great Anatolian pottery centre of Iznik. Chinese porcelain imports meanwhile continued to arrive in western Europe via Middle Eastern middlemen (Finlay 2010).

Competition in/for the East

In the second half of the thirteenth century, the Italians sent several political (papal) and trade (e.g. Marco Polo) missions to the Mongol empire to establish direct links with the East. Still, Muslim control of the sea and land routes connecting East and Southeast Asia with the Mediterranean remained firm.

The fourteenth century, however, witnessed political and socio-economic changes in the Indian Ocean and the Mediterranean, with important repercussions for Mediterranean relations with the East. The Black Death that raged in the Middle East and Europe from 1347 to 1348 led to huge population depletion (Abu Lughod 1989, *pace* Chaudhuri 1990). The Mongol loss of control of China in 1368 dissolved the direct links that had existed under their rule. Meanwhile, in Anatolia, Ottoman expansion began in earnest under the son of the dynasty's founder, Orhan (r.1324–1362 CE). In Egypt, sugar export had collapsed and the local market for luxury objects withered (Tsugitaka 2004). Italian traders, by now virtually in control of trade in the Egyptian

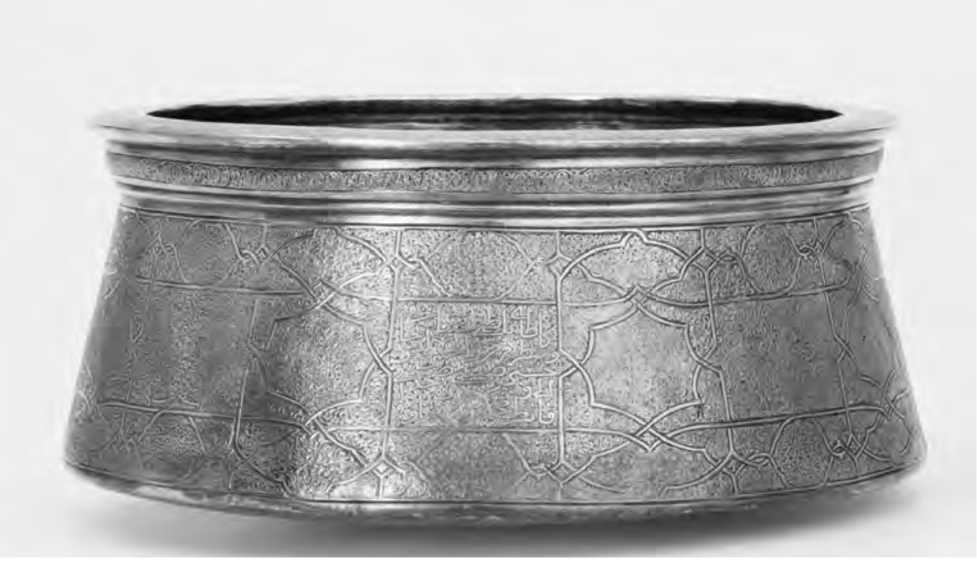

Figure 7.5.4a Mamluk bowl for the European market. Fourteenth-fifteenth century CE. Nasser D Khalili Collection of Islamic Art. © Nour Foundation. Courtesy of the Khalili Family Trust. Object MTW 1542

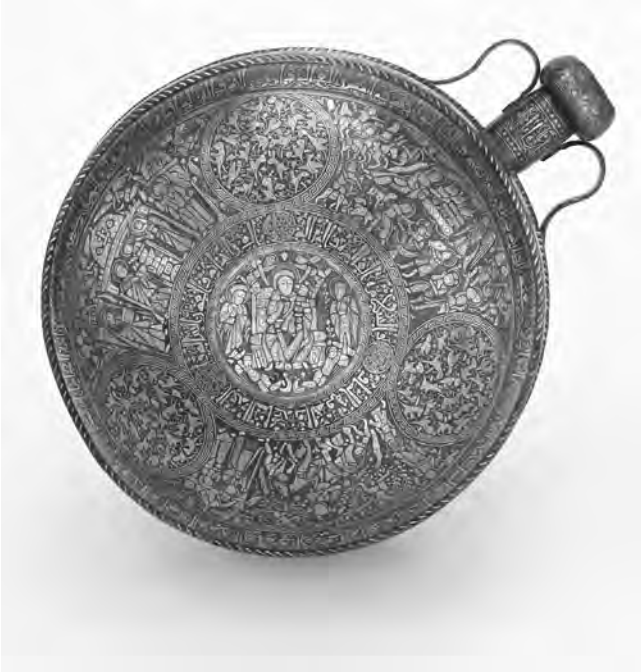

Figure 7.5.4b Canteen from mid-thirteenth century Syria depicting the virgin and child apparently produced for a European patron. Freer Gallery of Art. © Smithsonian Institution, Washington, DC: Purchase F1941.10

ports, could place demands on Mamluk artisans, who were forced to produce exclusively for the European market (Constable 1996). These objects incorporated styles popular in Egypt and Syria at the time and sometimes even displayed Latin inscriptions (Figure 7.5.4) (Mack 2002). Commercial exchange between Egypt and Venice continued to expand until the Ottoman take-over of the country in 1517.

The arrival of a Portuguese fleet in the Indian Ocean in 1498 and the establishment of that country's exclusive control of Indian trade in the next century did not remain unchallenged. The incorporation of Egypt into the Ottoman empire provided the Ottomans with direct access to the Indian Ocean, motivating Suleyman the Magnificent (r.1520–1566 CE) to initiate a series of campaigns against the Portugese. Suleyman's rule extended from North Africa into the Balkans and the Persian Gulf, starting yet another period in which influences from the different corners of an extensive empire moved along expanded and intensified networks, establishing an intra-cultural zone and leading to the period's famous literary, cultural and artistic achievements.

Conclusions

Throughout this period, the Mediterranean played a key role in the networks extending from southern and eastern Asia to western Europe. How these networks materialised, what the preferred routes were, what communities were involved along the way, what and who moved along the routes – traders, pilgrims, scholars, armies, goods, techniques, ideas etc. – and the availability and desirability of goods, changed with the formation of new political and socio-economic units in the region and beyond. Cultural entanglements through frequent and intense interactions similarly varied, leading to diverse degrees of globalisation.

This chapter aimed to show that changing geopolitical constellations in the Indian Ocean, Arabia, West Asia and Europe over the period 600–1600 CE had socio-economic repercussions for the Mediterranean, leading to cultural realignments. The Mediterranean was connected to a global exchange system, but politico-economic forces determined the nodal orientation, the density and direction of flows of material and people and, therefore, the degree to which it functioned in the intra-cultural zones thus created. Continuously shifting long-distance trade networks transported products, technical know-how, tastes and ideas. Shifting local material repertoires arose in conversation with global trends, which were shared across the Mediterranean.

We have seen that in the sixth century, a global system linked the Mediterranean via the Middle East with Asia. The collapse of these networks caused a shortage of bulk imports. Continuous demand gave rise to locally developed forms, styles and techniques. Within this reduced Mediterranean arena a newly formed material repertoire constituted the networks across the sea. The Muslim empire joined vast cultural regions into one political-economic zone facilitating mobility and exchange leading to new material forms with the centre of gravity having shifted eastwards. As vibrant economic and cultural centres, cities played an especially important role in the creation of a material vocabulary, which was at the same time recognisably Islamic and explicitly regional. From the twelfth century, the rising economic forces in Italy and Byzantium imposed their demands and tastes on the supply and production networks across the Mediterranean. The creation of a vital intra-cultural zone of exchange in the Mediterranean, connecting the eastern and western shores of the sea, continued with the establishment of the Ottoman empire. This provided the military, political and economic force for a cultural flourishing within its borders, with an impact far beyond. Culturally intertwined, with western European painters working at the sultan's court, slave markets in Italy and Spain supplying the bulk for the Muslim markets, and Ottoman ceramics, textiles and objects being traded in European markets, Mediterranean networks again found expression in new material objects and forms.

Consumption and reception of foreign objects, however, were digested locally with indigenous preferences and powers forging new global forms in a dynamic cultural arena (Feinman, Jennings this volume). The local dimension of the formation of global material forms is expressed in the demand for certain foreign objects unavailable locally, with imported objects sometimes replacing local alternatives, but also, in the process, offering new meanings and uses to imported products. In eleventh- to twelfth-century Egypt, Byzantine brocades and furniture were popular, even though local alternatives were available. While the import of red garnets from Sri Lanka to western Europe stopped around 600 CE, as their disappearance from Merovingian graves suggests, they apparently continued to be used in England. When imports were not available, but demand continued, on the other hand, alternatives had to be found, leading to changed exchange networks and nodes as was the case when Egyptians started to use Sasanian and Byzantine silks in the late sixth century when silks from East Asia ceased to be traded on a large scale.

Conversely, foreign objects were adjusted to fit local needs and inclinations. Some of the most precious Muslim textiles produced in the Middle East have survived in European relics. Fatimid rock crystal ewers were remounted for European patrons (Figure 7.5.5). Chinese porcelain and other ceramics obtained as (diplomatic) gifts or captured from the Muslim world were refurbished in Venice in the tenth century to form part of a cabinet of war trophies (Mango 2009). Such locally developed material forms could eventually, in their turn, impact

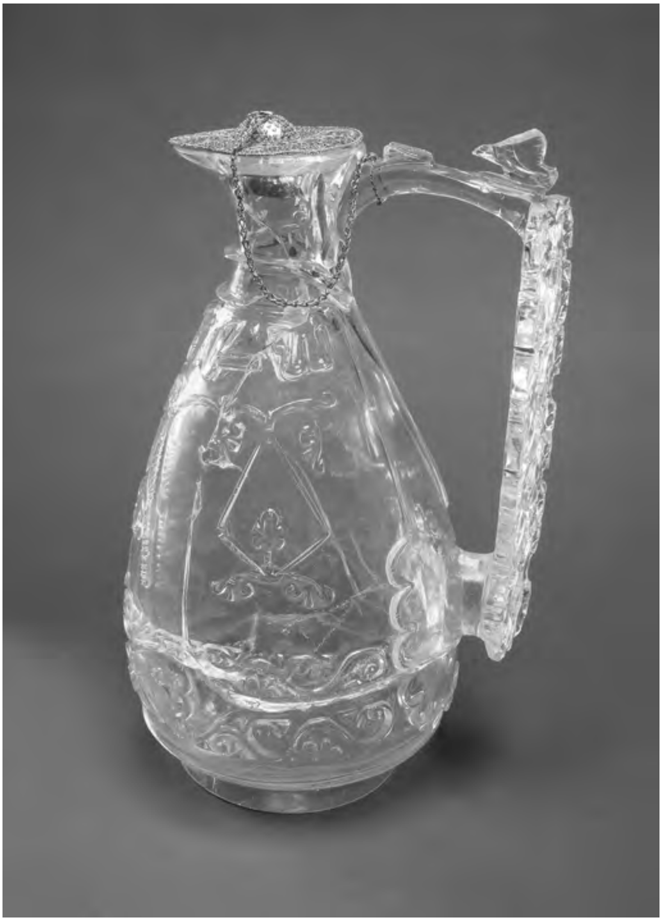

Figure 7.5.5 Fatimid rock crystal, late tenth–early eleventh century, remounted in southern Italy in the eleventh century and kept at the abbey of Saint Denis. Paris, Musée du Louvre. Object MR333. Photo © RMN-Grand Palais (musée du Louvre)/ Peter Willi

manufacture in the production centres where the 'originals' stemmed from. In response to a continuing rising demand, Chinese producers turned to fabricating blue and white porcelains for an Islamic market following decorative patterns and styles popular in the west. Muslim traders were in charge of the export to the Middle Eastern markets. Similarly, Mamluk artisans produced oriental objects with Latin inscriptions for the Italian markets.

Regime change, conquests and the formation of state structures thus affected the flow of objects. The resulting shifts in trade networks, nodes and routes affected the distribution and organisation of people and economic production. Cities were established or dwindled away, industrial, commercial and agricultural production were developed or redirected. This then led to changes in commercial and production organisation, shifts in artisanal activities, and the use of workshops and other production centres. Finally, the impact can be shown in household activities, with imported products being replaced by locally produced ones or local forms being imposed on new introductions (Feinman this volume).

Beyond political-economic realities, cultural, religious and social dynamics played a role in shaping material forms. While such motives themselves might be less visible in the archaeological record, the results obviously are. Ideologies and religions, their norms, prescriptions and expectations as well as their ritual and cultic establishments, had as much of an impact on the production and consumption of material objects. As any other religion, Islam established certain social and cultural practices amongst its earliest believers in the normative system that was eventually established. While it is difficult to separate practice sharply from prescription, certain changes in the material repertoire should be connected to the introduction of new material attitudes. Such dynamics are well attested in the different attitudes towards the use of silk in the Muslim empire and contemporary realms. While sumptuary laws in medieval China and Byzantium limited the wearing of (specific products of) silk to certain governmental classes, Islam, with its social programme of equality, put a general ban on the use of this luxury product of clothing for all male believers, except in the form of limited decorations (Sijpesteijn 2004).

There seem to be two approaches to explaining changes in historical economic dynamics and related material orientations and expressions. There are those who favour the role of local structures and undercurrents, of regional institutions and connections (Wickham 2005; Morony 2004). In the overview presented above, on the other hand, supra-regional connections and networks need to be invoked to explain the sketched developments in cultural expressions. The turn to local production of goods in seventh-century Egypt, which until then had been imported, cannot be explained by an indigenous economic collapse (Power 2012; Sarris 2002). There was no collapse of the Egyptian economy, but, rather, political and economic developments in the Indian Ocean and the Near East caused a diminished flow of foreign products to reach Egypt. The changed role of the Mamluk state Mediterranean networks was as much the result of domestic developments as of the arrival of European commercial fleets in the Indian Ocean. Such long-distance connections linked in overlapping and associated networks made cultural exchange possible across vast areas, resulting in vibrant and creative cultural arenas. The resulting interdependent commercial networks also created vulnerability, creating significant dislocation when they collapsed (Feinman, Jennings, Knappett in this volume).

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7.6

The Renaissance in material culture

Material mimesis as force and evidence of globalization

Marta Ajmar

Introduction

This chapter focuses on material culture as a point of entry into a wider understanding of the Renaissance as a period of global circulation of technological and artistic knowledge and innovation. It centres on pottery relying on coloured glazes – *slipware* and *maiolica* – and 'imitation lacquer' or *lacca*, two Italian artisanal productions of non-European origins that took root on the peninsula in the 'long Renaissance' – roughly speaking between the early fifteenth- and the late sixteenth-century, crossing regional boundaries within the Mediterranean in continuous processes of cumulative innovation and creative emulation, ultimately providing evidence for wide long-term connections between different regions in Europe, Africa and Asia. These productions will be explored through a new lens, what I have proposed we might call 'material mimesis', whereby an art engages in the cognitive imitation of another *materially and technologically*, bringing to light knowledge exchange and cross-cultural interconnectedness in the *longue durée*. The artefacts under scrutiny are distinctive for their physical complexity, made up of a multi-layered structure, highlighted by their brilliant finish, designed to engage with light. They also stand out by virtue of their durability, both in the sense of mastering impermanent substances to achieve a new physically stable whole and in the temporal sense of *longue-dureé* stratification. Thus the focus on objects built by using *technologies relying on layering* will be proposed as a way of interrogating the macro-narratives, and a materiality-based approach will be used as a means to help disrupt rigid geographical and chronological classifications. This is a new perspective on globalization that is aligned with the emphasis on the multiscalar (Feinman this volume) and networks (Knappett this volume) by focusing on the material culture aspect, yet it also provides a new dimension to globalization thinking. Thus, instead of considering those objects that physically moved from one geographical, temporal and thus cultural context to another, this chapter focuses on those that without travelling *embodied within themselves cross-spatial, cross-temporal* and thus *cross-cultural knowledge*, being as they were intrinsically constituted of culturally multi-layered know-how that developed across time and space. To put it metaphorically, instead of looking at well-travelled, 'globe-trotting' artefacts, carrying a passport with multiple stamps, we will explore objects *embodying* a global DNA.

Before zooming in on the objects of our investigation, let us first briefly unpack two conceptual nodes: 'Renaissance' and 'material culture'. The Renaissance is a historiographical heavy weight, often associated with major historical shifts, from the 'age of discoveries', the inset of 'modernity' and the revival of Greco-Roman antiquity, to the emergence of 'art' and the dawn of the 'scientific revolution', to name just a few (for a critical unpacking of these concepts see contributions in Ruggiero 2002, and also Goody 2010; Smith 2004; Woolfson 2005; Fantoni 2005). While these phrases go some way in highlighting the momentous nature of this historical period and its broad cultural parameters, they all contribute in different ways to constructing a distorted image of chronological segregation for the Renaissance, whereby the very distinctiveness of the period is argued through a sharp separation from what comes before and after. Moreover, they conspire towards constructing a picture of the Renaissance as a period of Eurocentrism and of European exceptionalism, one that elevates (certain regions of) Europe above the rest of the globe. While the entry points to this chapter are the period conventionally known as Renaissance – the fifteenth and sixteenth centuries – and the region most canonically associated with it – Italy – ultimately an alternative temporal and geographical perspective will be offered. For this purpose I will recur to the notion of *longue durée* (Braudel 1949), and appeal to 'open time' approaches emerging from art history and anthropology (Kubler 1962). In addition, the Renaissance will be presented as a period of expanded geographies and heightened cultural interconnectedness, a melting pot for the coming together of global forces in the shaping of different areas of human activity, including some of its material expressions. Through this two-pronged strategy I am hoping to show how 'Italian Renaissance' artefacts might in fact be seen as stratified temporal and geographical clusters, not unlike geological specimens resulting from multiple, diachronic, synchronic and anachronic, spatially interwoven phenomena.

The phrase 'material culture' will also be subjected to some scrutiny, particularly with regard to examining the notion of 'material' within material culture. Rather than taking the 'material' component of material culture as a given, this chapter will bring forward an approach that treats materiality like any other historical construct, encompassing a set of meanings and a potential for agency integral to its cultural context/s, and thus subject to change. Focusing on artefacts that emerge on the Italian object-scape during the Renaissance, it will be suggested that a materiality-based approach can help open up sealed geographical and chronological classifications.

In this chapter, I will propose a way of exploring Italian colour-glazed earthenware and 'imitation lacquer' from the perspective of their materiality – the physical, technological, sensory and metaphorical properties embedded in their actual and perceived material make-up. Themes of global trade, customization, imitation and import substitution have provided the interpretive framework for these kinds of commodities, highlighting the complex commercial networks which allowed such objects to occupy a space within Eurasian centres of production and consumption since at least the fifteenth century (Jardine 1996; Berg 2015). I will argue that while some of these commodities were intended to travel across increasingly global commercial arenas, many others never moved far from their places of production and yet, even among these 'sedentary' objects, it is possible to trace geographically wide and temporally deep material bonds – a global long-established DNA. While the 'horizontal ontology', the surface-level, design connections of some of these artefacts has been recognized (Finlay 2010), their temporal depth, the vertical forces responsible for their material coming together as objects have generally not been the focus of scholarship. In this chapter it will be proposed that it is the intersection of these two trajectories that we should consider. What would we see if we were to open up, to slice through these artefacts and scrutinize their materiality and their structural and technological complexity through a lens sensitive not only to cross-cultural connections across space, but also to historical stratification?

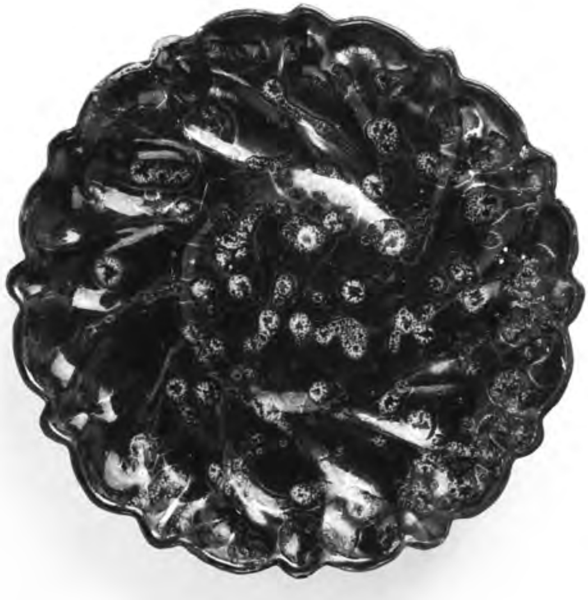

Figure 7.6.1 *Tazza* decorated with manganese glaze possibly imitating lacquer or tortoise shell, earthenware, Italy, 1580–1600 CE, Victoria and Albert Museum, London. © Victoria and Albert Museum, London

The chapter sets forth an interpretive framework for understanding objects that do not, at first glance, fit the Italian Renaissance canon of the arts. An illuminating example is offered by the earthenware vessel illustrated here (Figure 7.6.1), described by the V&A Search the Collections online catalogue as a '*tazza* with a gadrooned edge covered with a transparent dark manganese-purple glaze over splashes of white intended to imitate tortoiseshell' and identified as Italian, possibly Tuscan, *c.*1580–1600. This stark, dark glaze is atypical within Italian Renaissance pottery and the non-figurative vocabulary of its mottled surface is unorthodox. In other words, this pot is highly unusual. Where should we situate – aesthetically, materially, technologically and epistemologically – this 'misfit', this object that bears little relation with contemporary Italian ceramics, or with other 'local' visual arts and material culture? How can we then explain why this dish looks 'at home' with these other objects: a Chinese twelfth or thirteenth century 'tortoise-shell' (a term in use at the time, Mowry 1996) stoneware dish (Figure 7.6.2) and a Japanese export lacquer dish dating from *c.*1600 (Figure 7.6.3a) Focusing on the man-made, how should we interpret these perceived affinities? Are they purely aesthetic, or do they engage the technological cultures responsible for their manufacture? If there are actual connections between these distant artefacts, how did they come about? And where does this leave the link with a Greco-Roman antiquity, and with an orthodox idea of the Renaissance, as evoked by the term '*tazza*'?

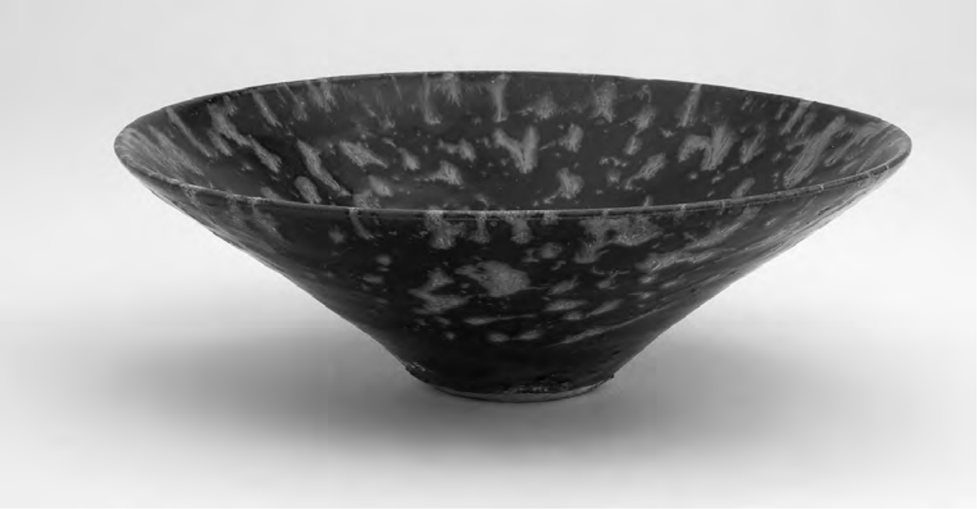

Figure 7.6.2 Bowl with 'tortoise-shell' glaze, stoneware, China, Jizhou, *c.*1100–1300 CE, British Museum, London. © The Trustees of the British Museum. All rights reserved

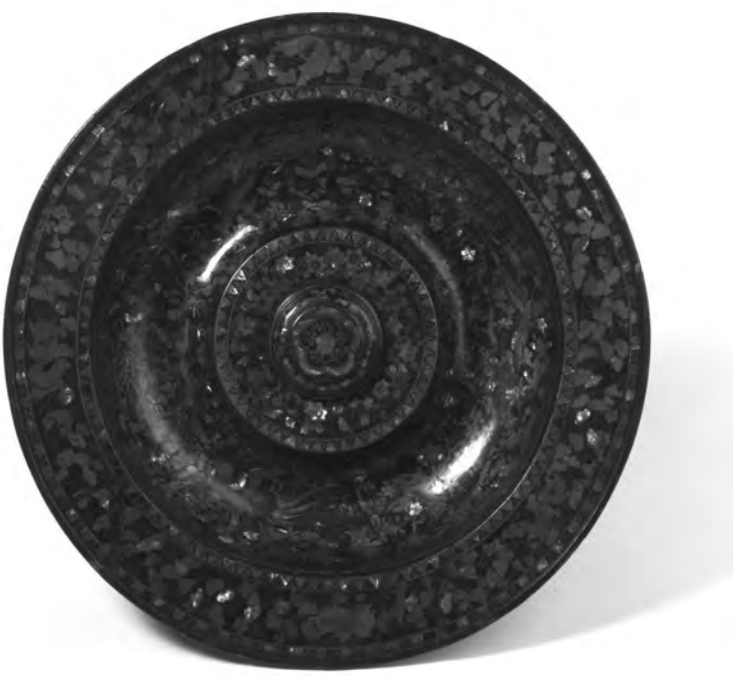

Figure 7.6.3a Dish, lacquer, Japan, *c.*1600 CE, Victoria and Albert Museum, London. © Victoria and Albert Museum, London

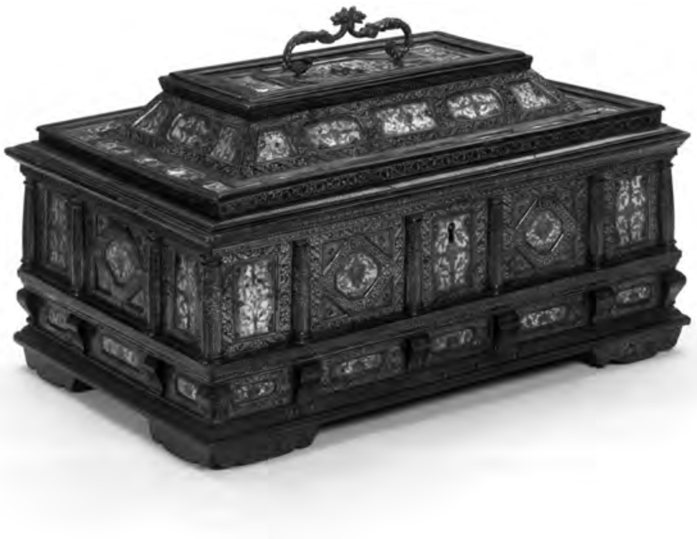

Figure 7.6.3b Casket, lacquer, Venice, 1575–1600 CE, Victoria and Albert Museum, London. © Victoria and Albert Museum, London

Defining material mimesis

Let us first briefly define material mimesis. The *arti* of the Italian Renaissance are conventionally seen as centred on a purely visual imitation of nature or other arts. Giorgio Vasari, to give just one influential sixteenth-century example, describes the imitation of nature – the variant of mimesis that he is mostly interested in – principally as figuration. This emerges clearly in his definition of *disegno*, which he describes as 'the imitation of the most beautiful in nature in all its figures, both painted and sculpted' (Vasari 1966: volume 4, 874). According to this concept of a pictorial, figurative imitation of nature, purely representational strategies of life-likeness are deployed and, for example, a tree is made to look like a tree through an engagement with line, form and colour.

Placing the representation of figures at the core of the arts has enormous implications for those productions whose remit might neither be fundamentally bound nor uniquely engaged with this form of expression, and that might not embrace this kind of mimetic strategy. Moreover, subsuming as Vasari does all the so-called 'minor arts' – including glass, ceramics, woodwork, textiles, metalwork and ivory carving – under the rubric of the visual arts of painting or sculpture means asserting a bond between the arts based on *figurative,* rather than *technological* or *material* imitation. Accordingly, not much attention is paid by Vasari or, to my knowledge, any other Italian Renaissance art theorist to those arts that engage with mimesis mainly or exclusively through non-pictorial means, whether through a material imitation of nature or of other arts, or both. Here we will foreground a kind of mimesis which instead of striving towards visual imitation, focuses on material, technological, structural and procreative emulation – in the sense of looking to reproduce and then embody the material components and the generative forces of art and nature – whereby imitation is achieved through physical, in-depth engagement and speculation, thus becoming a profound tool of material cognition, learning, speculation, reproduction, and transformation.

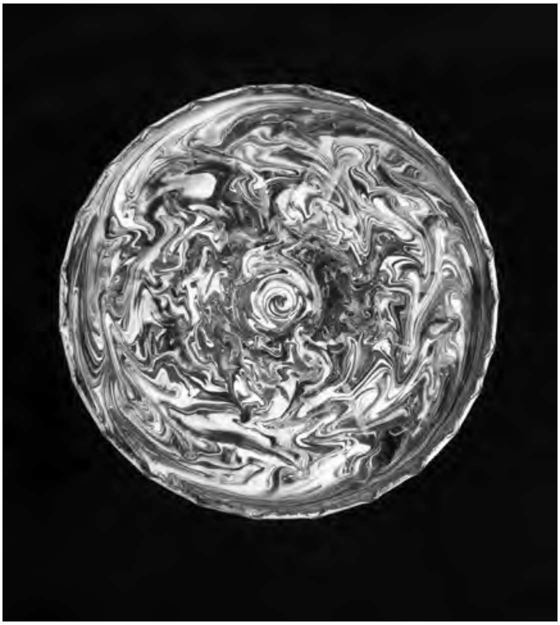

Figure 7.6.4a Bowl with marbled slipware decoration, earthenware, Italy, sixteenth century CE, Ashmolean Museum, Oxford. © Ashmolean Museum, University of Oxford

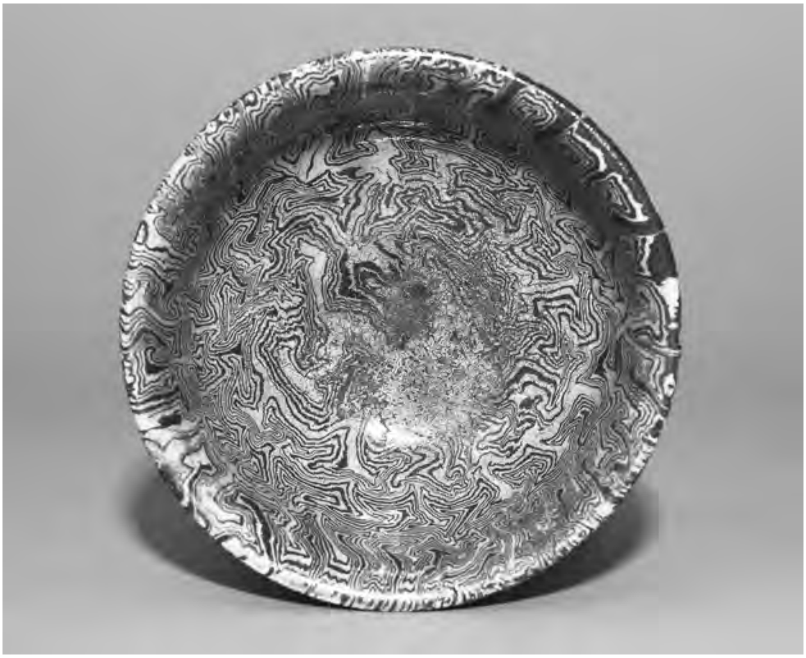

Figure 7.6.4b Bowl with red marbled decoration under yellow glaze, earthenware, China, eighth century CE, Ashmolean Museum, Oxford. © Ashmolean Museum, University of Oxford

One of the most explicit cases of material mimesis between art and nature might be seen in so-called chalcedony glass (http://collections.vam.ac.uk/item/O1433/jug-unknown/), a fifteenth-century Venetian production capable of transcending itself to take on trans-materially the appearance of a natural material, such as the semi-precious mineral agate. Made by adding metal oxides to the glass formula, *vetro calcedonio* might be seen as a physical embodiment of the Renaissance understanding of materials whereby glass is classified as a semi-mineral, crossing the boundaries between the natural and the man-made (Biringuccio 1559: 98–103). The vigorous waves of liquid glass that make up these artefacts are also a powerful metaphor of the Aristotelian epistemological model, whereby minerals are juices solidified within the earth (Aristotle I: 111,6). They above all evoke a connected genesis and a shared ontology between the semi-precious stone and the glass object – an intrinsic material mimesis between art and nature.

The Renaissance technologies emerging anew or re-emerging on the horizon that embrace the principle of material mimesis in all its variations are many. Material mimesis engages not only in the imitation of nature, but also of man-made things, and can merge the 'natural' and the 'artificial'. This mimetic impetus might also be seen as underpinning meaningful cross-cultural connections across space and time. This can be exemplified by the Italian sixteenth-century earthenware bowl imitating marble or onyx (Figure 7.6.4a), where the marbling effect has been obtained by mixing different pigments and slips with a brush. This decorative strategy is described by nearly contemporary Italian written sources, which refer to it as 'earth in various colours in the mode of marble' (Tanara 1661: 20). The pot might also be seen as echoing earlier non-European earthenware, such as fifteenth-century Egyptian marbled pottery (Ashmolean Museum, Oxford Museum number EA1956.27), which in turn might be apprehended as emulating a distinctive type of onyx, and possibly even much earlier Chinese earthenware (Figure 7.6.4b), such as this glazed earthenware bowl with red marbled decoration under a yellow glaze from the Tang period (eighth century CE).

Finally, we might detect material mimesis *across media*, for example between chalcedony glass and marbled pottery (Figure 7.6.4a). This wide cross-cultural mimetic approach travelling through time and space might seem bewildering, possibly leading to a 'vertigo effect' (Finlay 2010). However, as historians of material culture we should take seriously the implications generated by this apparent interconnectedness. Although all these man-made variations on the theme of marbling embody significant differences within their material substance and technological make-up, so that comparable effects might be obtained through dissimilar material means, they unquestionably share a common ground too. While we might never be able to document how these connections came about – whether through human, material, written, visual contact or a combination of those factors – they allow some room for speculation. For one example, the holdings of the Grand Dukes of Florence have revealed a significant collection of recent and ancient Chinese ceramics which is likely to have been mobilized and imitated in the extensive experimentation involved in the production of so-called Medici porcelain (Spallanzani 1978, 1994). Therefore we cannot rule out that these kinds of Italian, Egyptian and Chinese marbled pots, while distant in time in their making, might have at some point inhabited the same space. However, even in the event that these artefacts never came in direct contact with each other we might suggest that their similarities may be due to phenomena such as the movement of people, objects and knowledge across wide time–space lines. Surely, some of their features might have been the natural result of processes of workshop experimentation and thus unrelated with each other. However, even within this scenario we must recognize that the existence of technological milestones in the development of world ceramics is not something that can be easily dismissed. It forces us to recognize the significance of acquiring at any given time particular technological skills that are subsequently built on, rather than separately re-invented. For one example, the presence on all these Italian Renaissance or earlier vessels of an upper, transparent, vitreous glaze that seals the object is an ancient Chinese technology that all later ceramic cultures adopted. Thus one way of seeing all of the objects under scrutiny is as multi-layered composites, each layer a material agent and witness of a particular phase in technological innovation and which might inspire material mimesis in the next stage.

Held up to the light: seeing into objects

To explore these issues we will frame this discussion within Renaissance debates on the nature of materials as foregrounded by natural philosophy treatises. This is not intended as a way to put text before object and grant it a higher authority, but simply to expand the context within which contemporary practices of material interpretation might be situated. We will take as a starting point Italian Renaissance responses to a global material of relatively recent arrival, Chinese porcelain, whose make-up never failed to generate puzzlement and wonder. Interrogations into the materiality of porcelain – a medium neither self-evident nor familiar to European eyes – reveal an inquisitive approach among those who came into contact with it, one that might be seen as testimony of a wider outlook towards material knowing. Some interesting insights into the ways porcelain appears to Renaissance eyes emerge from an exchange that took place in the 1550s between two humanists, Gerolamo Cardano and Giovanni Scaligero (Lightbown 1969). In his *De subtilitate*, Cardano had questioned the worth of Chinese porcelain, which he saw as a poor imitation of earlier kinds of pottery and of ancient myrrhine vases. Porcelain was often believed – in line with Aristotelian theories of matter – to form naturally over a long time from juices condensing underground. Cardano embraced this theory but condemned the more recent production of such ware, where the decorative surface had in his view replaced good workmanship and quality:

> For the price created abundance and as they studied to increase production, since the nobler material was wanting, they substituted another, and on this account the painting of them was thought up to mend their poverty, so that honour and sincerity departed from these vessels. For the material is either poorer or not the same, or altogether more impure, or not so well worked, or the vessels themselves are dug up before time from cupidity of gain by men impatient of delay.
>
> *(Cardano 2004: 432–33)*

Scaligero responded to this dismissive approach, and instead offered a tribute to porcelain as a material marvel, capable of undergoing a process of material mimesis – here meant as intrinsic metamorphosis – whereby an opaque material could become translucent:

> Who does not hold in the highest esteem that workmanship which renders a material not transparent of its own nature translucent instead of opaque. Therefore, Cardano, let us be advocates for the arts and abilities of our age, by whose industry the material has been made both purer and to show more excellence in the artist. . . . In the first place the paintings, which by themselves scarcely show, appear delightfully to the eye if held up to the light: the remaining spaces will allow the eye to pass through.
>
> *(Scaliger 1557: 135–36)*

Thus porcelain, interrogated here materially and technologically, its natural opacity overcome through human agency, is celebrated for its transformative power and for its transparency, as a material that can be looked into and scrutinized *structurally*, with the help of light.

This approach, proposing a distinctive way of understanding a material by *looking into* and *through it*, is amplified by a later source, Ferrante Imperato's *Historia Naturale* (1599), a work dedicated to both 'natural' and 'artificial' matters and featuring, among recently 'discovered' plants and animals, also products new to European eyes, such as Chinese ink and porcelain. In it the Neapolitan apothecary, natural philosopher and collector Imperato devotes five books to the discussion of different 'modern' and 'ancient' kinds of clay and their properties before and after firing and glazing. Here we find a significant mention of Chinese porcelain:

> brought to us from the Levant . . . they are made of matter like no other, white, hard and subtle: so that when they are placed between the eye and the light, they can be seen in some degree of transparency.
>
> *(Imperato 1599: 26–28)*

In the following pages, Imperato goes beyond the surface of porcelain and interrogates it structurally, through a process of close investigation and intellectual 'unmaking' of the object that in other parts of his treatise he refers to as *discernimento* – discernment – a word whose etymology implies a double scrutiny and literally refers to the process of sieving (from the Latin *cerno*) by separating the kernel from the bran. This intense physical and mental examination is something that might be seen at the heart of practices of 'artisanal epistemology' (Smith 2004). Imperato's discerning eye dissections porcelain almost anatomically, emphasizing the layers of glazes and pigments and the underlying body of the pot, pointing to an understanding of artefacts through their structural complexity and intrinsic, beyond-the-surface, deep materiality:

> the excellence of porcelain resides as much in the body as in the glaze. In them, the whiteness of the one [body] is so similar to the whiteness of the other [glaze] that those who are not familiar with this matter think that they are looking at one substance alone. Moreover, the glaze is so tender that the blue applied over it seeps through the substance of the glaze.
>
> *(Imperato 1599: 26–28)*

Thus porcelain is understood not just superficially, but in terms of its matter, through the layers that envelop and structure the object. Artefacts might be seen to participate in a broader phenomenon of apprehending objects beyond surface level, where their materiality is interrogated in terms of structure, stratification and depth, and where the eye of the discerning beholder is not only looking at, but *looking into*.

The central tenet of this chapter is that we should connect the distinctive material mimesis impetus at the heart of artisanal practices discussed earlier with the approach brought forward by Renaissance natural philosophy, where the examination of objects involves a physical or a metaphorical 'holding them up to the light' and *seeing into* them. This penetrative gaze interrogating the nature of matter might in fact be seen as at one with the intellectual and practical approaches at the heart of craftsmen's material mimesis as they 'take apart' and 're-make' artefacts through active material speculation and technological emulation. It is not accidental that this investigative approach is applied to global artefacts of great distance, such as porcelain, whose geographical and historical origin is not fully known or understood. It is contended here that this way of seeing into things exemplifies a wider outlook that offers the potential for apprehending all objects physically and structurally, with the aim of unmaking and re-making their material and cross-cultural complexity and thus realizing through material mimesis their global potential.

Lacquer: interconnected and multi-layered

In this section we will examine another global commodity, Italian imitation lacquer (Figure 7.6.3b), as an art of connectivity and material stratification. As a cultural product, *lacca* is richly multi-layered: as a novel, local imitation of a non-European craft, with local variants made across many different regions including Japan, China, India, Persia and the Ottoman empire, it embodies geographically wide and temporally deep connections. *Lacca* is also a technology made up of complex processes of juxtaposition, its physical layering engaging with the practices of material mimesis in distinctive ways, as we will discuss below.

To gain an insight into lacquer as a technology we will begin by invoking the words of a European traveller, the Portuguese Jesuit father João Rodrigues (1561–1633), who arrived in Japan in the 1590s, where he lived for about three decades. In his multi-volume *History of the Church in Japan*, published in 1620–1621, a detailed and wide-ranging account of Japanese religion and culture, Rodrigues focuses on craft and provides an insightful description of and response to lacquer. Rodrigues associates Japanese lacquer (Figure 7.6.3a) with painting, and singles it out as an art relying on the application of multiple coatings of varnish:

> Throughout the whole kingdom they practise an art which has something in common with painting; this is the art of varnishing, which we call over here *urushar* from the word *urushi*, the varnish made from the gum of a certain tree. They tap the trunk of this tree at a certain time of the year and draw off an excellent gum that is used as a varnish; this tree is also found in China, the Caucasus, Cambodia and Siam. But of all these nations the Japanese stand supreme in this art, for they are so skilful that they can make a varnished object look as if it were made of smooth and glittering leather [. . .]. Water, however hot it may be, falling on these dishes and bowls does not do any damage, just as if the bowls were made of glazed earthenware.
>
> *(Cooper 1965: 258–89)*

This account of a quintessentially non-European product – lacquer – seen through the eyes of a European beholder offers an inspiring template for thinking about the ways in which the understanding of materials – especially unknown or little-known materials – might have been framed at the time. Rodrigues apprehends the materiality of Japanese lacquer mimetically and structurally, by drawing comparisons with contemporary technologies and artefacts popular in Europe. Thus lacquer as a process is associated with painting, for its reliance on the application of multiple layers of varnish. Lacquer as a finished product is then described sensorially, and a material analogy is established with other objects that would have been known to a European consumer, and which also relied on multiple coatings, but also on sensitivity to light: with lacquered and gilded leather, for its sensuous, soft and luminous surface, obtained by superimposing coloured varnishes to a gold or silver leaf background; and with glazed pottery for its vitreous hardness and durability, achieved by applying several opaque and/or transparent coatings to a clay body. Lacquer is thus understood by association with other, better-known materials and processes and through the lens of an experience and knowledge constructed on things familiar within the European object-scape. Through a process that we might call domestication, whereby the distant is made closer, the unknown explained, the new is thus acquainted with, in a process which might be the first step towards a kind of material and technological approaching, which I will suggest is at the heart of practices of material mimesis.

What physical properties tie together these different media? They are all built on structural complexity, through processes of stratification of varnishes and glazes that transform the separate ingredients – which often originate from different parts of the globe – into a new fused together product, revealing a novel wholeness. And they are designed to be activated by light, thanks to the lustre and brilliance of their surface. Thus they might be perceived as artefacts to be *seen into*, or even *through*, rather than merely looked at, by virtue of a process of material opening up which ties in with the notions of natural philosophical enquiry into matter described earlier. In these objects structural complexity equals technological stratification and is the result of both geographical width and temporal depth. These properties might all be seen as being embedded within orthodox Renaissance articulations around materials and artefacts, but they might simultaneously provide a template for connecting the materiality of these three types of objects – lacquer, *maiolica* and gilded leather – to a less expected value system for understanding and working with materials rooted in the non-European Middle Ages and the non-Greco-Roman Antiquity. These artefacts – whether designed to travel or not – are *in themselves*, *intrinsically*, *materially*, embodiments of global connections and continuities across extended periods and between different forms of material knowledge – technological, aesthetic, sensory.

We will now look at the structural processes whereby different raw materials and technologies – though separated by geographical and temporal distance – might come together to make an object that becomes ontologically a new whole. Although lacquer and tin-glazed pottery rely on different raw materials and on technologically distant processes in their making, they both embody a similar ontology based on structural complexity and surface treatment built on the principles of layering and glazing, on lustre, smoothness and reflectivity. They are made by overlaying different material elements to achieve a new, fused together and unified whole. Their material identity is the result of manufacturing processes that exemplify a technological triumph over the natural state of the raw materials, an achievement that transforms their material being and their technological and sensory properties: whereby clay – soft and plastic by nature – and lacquer – liquid and viscous – morph into hard, solid, inflexible and durable substances; whereby the rough and dull surfaces of wood, leather and clay are made lustrous and reflective to the eye and smooth to the touch. The vitrification of glaze and polymerization of lacquer have in common a reliance on an alchemical power of transformation that in and of itself represents a kind of revelation, an opening up, and stimulates a *seeing into*.

Seeing into Venetian lacquer as a global product

In order to explore the global identity of Italian lacquer we will now ask what does *lacca* have in common with its non-European counterparts. We are well aware that the singularity of the term 'lacquer' is *per se* misleading, as it embraces what in fact is a plurality of significantly different local variations, and a very diverse range of constituent ingredients and recipes, technologies and aesthetic results. Japanese, Chinese, Persian and Venetian lacquer had substantially, chemically different components, to the extent that scholarship generally distinguishes between 'true lacquer' – Chinese and Japanese – and the rest. The resin originally used to make lacquer in China and Japan, *rhus verniciflua*, was not available in Europe and was constantly re-invented through the use of different local raw materials, leading to many 'local' recipe variations. However, lacquer across Eurasia encompassed also striking affinities of *design process, composition and technology*, thus suggesting deep material connections in how it was made, understood and experienced. What we can see with lacquer are global processes of material mimesis operating at different levels, in fluid cross-cultural contamination.

To address this question it is useful to approach *lacca* linguistically. The existence of a cross-cultural lacquer *koine* is to some extent supported by language. The etymology of the word is worth some scrutiny: lacquer belongs to a broad semantic field that goes from the Arab and

Persian *LAK*, Sanskrit *LAKSHA*, Latin *LACA*, Spanish and Italian *LACCA* and that refers to the resin secreted by an insect, the shellac, and used to make a varnish with a distinctive red hue. In early modern Europe, the term 'lacquer' is occasionally used to refer to Chinese and Japanese lacquer work from the mid-seventeenth century. However, language allows for another perceived global connection to emerge: the term for lacquer that might have had most currency in the Renaissance and early modern period was 'Chinese varnish' (Bonanni 1720). With the Portuguese *VENIZ*, Spanish *BARNIZ*, Italian *VERNICE*, probably originating from the Latin *VITREUS*, varnish meant 'with the qualities of glass'. The term 'varnishing' was often used to refer to the techniques involved in what was literally seen as a process of *glazing* and *giving polish* to a surface using vitreous or glass-like substances and including a wide range of different resin-based solutions. And it is precisely this understanding of lacquer *as varnish* that allows us to draw mimetic technological connections between different species of lacquer across the globe and to inscribe these multi-layered varnished objects into a common framework of *seeing into*.

In the Renaissance, varnish can be associated with this kind of penetrative vision. In a popular painting handbook, Giovan Battista Armenini's *De' veri precetti della pittura*, varnish is seen to have a double effect: one to do with literally enlivening the painted *surface*, by exalting the chromatic appearance of painting and enhancing its durability: 'to bring to life and take out the colours and keep them beautiful and vivid for a very long time' (Armenini 1586: 129–30). The other is concerned with in-depth vision and bringing clarity and might be compared to the use of a magnifying glass or microscope: '[varnish] has the power to reveal all the minutiae of paintings and to make them appear very clearly' (Armenini 1586: 129–30). Thus varnish not only enhances the surface and appearance of the object to which it is applied, but it is also seen to expand what there is to see, the depth of the field of vision, allowing the eye to penetrate beyond the surface and discern what would be otherwise concealed, bringing out the detail, in a process comparable to the scrutiny exercized over objects seen through a glass lens. Varnish thus affects the experience and the agency of the object, encouraging a process of opening up and seeing into comparable to that practiced by natural philosophers apprehending global artefacts.

Venetian Renaissance *lacca* provides a rich platform for this exploration of *longue durée* global interconnectedness through material mimesis. Produced in China and Japan from as early as the seventh or eighth century BCE, by the tenth century CE lacquered objects were imitated in different parts of Asia, particularly in Persia, from which they gradually spread across Europe. From the 1450s Venice not only imported such artefacts, but emerged as a distinctive centre of production of lacquer, followed soon by other European centres of manufacture. In terms of design and decorative vocabulary, the closest reference for it resided in Middle Eastern precedents, for example in the form of Ottoman lacquered book bindings, which were imported into Venice from the fifteenth century onwards. Recent technical analysis on this Venetian lacquered casket held at the Metropolitan Museum (www.metmuseum.org/art/collection/search/201959) has revealed considerable affinities with lacquer made in the Ottoman world at the same time, for example in the use of colophony, a resin obtained from a pine tree which makes a hard, lustrous, durable, and gently scented coating (Rizzo 2007). Sixteenth-century Venetian 'books of secrets', gathering together technical recipes, provide a crucial source to understand whether such chemical affinity between Venetian and Ottoman lacquer had a basis in contemporary written knowledge and how was it understood. In his *Compendio de'secreti rationali*, one of the most popular Italian recipe books of the sixteenth century, first published in Venice in 1564, Leonardo Fioravanti provides an insight into whether and how this connection might have been interpreted, singling out colophony as an ingredient used in Ottoman lacquer (Rizzo 2007; Fioravanti 1660: 295–96). This chemical link thus opens the possibility of seeing these objects as both agents and evidence of material and technological cross-cultural connections, shifting the argument beyond merely aesthetic associations, beyond superficial imitation and import substitution, into the realm of material inter-connectedness, possibly mediated by the written text, or by human agency, or both.

The global connections embodied within lacquer can go further and include the affinity between Italian and Far-Eastern lacquer, which possibly involves a different species of material mimesis, less engaged with the sharing of chemical components and more with analogous strategies of material construction and decoration. Here the emulation, particularly between the Japanese and the Venetian caskets, seems to be more tectonic, involving parallel mechanical processes. This can be detected, for example, in the way in which the pearl shell incrustation found on Japanese objects is not just imitated in the Venetian examples through pictorial means, but takes material form through the application of finely ground mother-of-pearl on the upper layer of varnish. Equally important is the use of silver gilt foil, which we find suspended between transparent layers in both Italian and Japanese lacquer. This achieves not just a surface, painterly effect that makes Venetian lacquer resemble in some way Japanese *maki-e* lacquer, but also establishes in some way a material affinity between the two and a bond of common embodied action. Therefore while we are not, or not yet, in a position to document when and how these global contacts took place, it is unquestionable that these physical similarities affect the ontology of the artefacts involved, which don't just *look like* but in some way *are like* each other, material embodiments of global interconnectedness.

Periodizations and globalizations: material mimesis in Italian Renaissance pottery

In this last section I want to argue that this approach constructed on material mimesis can also help disturb comfortable periodizations of the Renaissance that see it predominantly as a rebirth of Greco-Roman/classical ideas and values. To attend to these questions I am going to focus on Italian tin-glazed earthenware or *maiolica*, for it is with pottery that the evidence for global matrixes and for temporal stratification at work is especially striking. Widely appreciated by the elites across Europe because of its intellectual cachet, Italian *maiolica* embodied the Renaissance idea of the culturally charged artefact and was enthusiastically collected. Because of its wide creative receptivity, *maiolica* can also be seen as an excellent indicator and agent of cultural transmission across the globe. The scholarship surrounding *maiolica* generally focuses on so-called *istoriato*, that is pottery depicting stories. This new type of narrative object developed in Italy in the second half of the fifteenth century and enabled this medium to come to terms with developments in the visual arts more broadly. Now pots could accommodate themes inspired from the classical antiquity or the Bible. The discourse surrounding *istoriato* has mostly brought about associations with 'high' culture and humanism and connections with painting. And yet there is a parallel story surrounding Renaissance ceramics that is less often told, but which can help to illuminate the complex and deep material roots of this medium, roots that would take it out of Italy and even Europe and away from a Greco-Roman past. Contemporary sources sensitive to the technological innovation embedded in *maiolica* remark on the brilliance of its glazes and on the lack of classical precedents for it. For example, Giorgio Vasari remarks how 'of this kind of vases the Romans had none . . . for the vases of those times don't have that lustrous glazing . . . which has been seen and is still seen in our times' (Vasari 1966: volume 5, 465).

This emphasis on 'lustrous glazing' takes us to what we might see as the immediate technological reference and commercial competitor for Italian Renaissance pottery: lustreware imported from the Middle East or Muslim southern Spain (Figure 7.6.5a). Lustreware was a

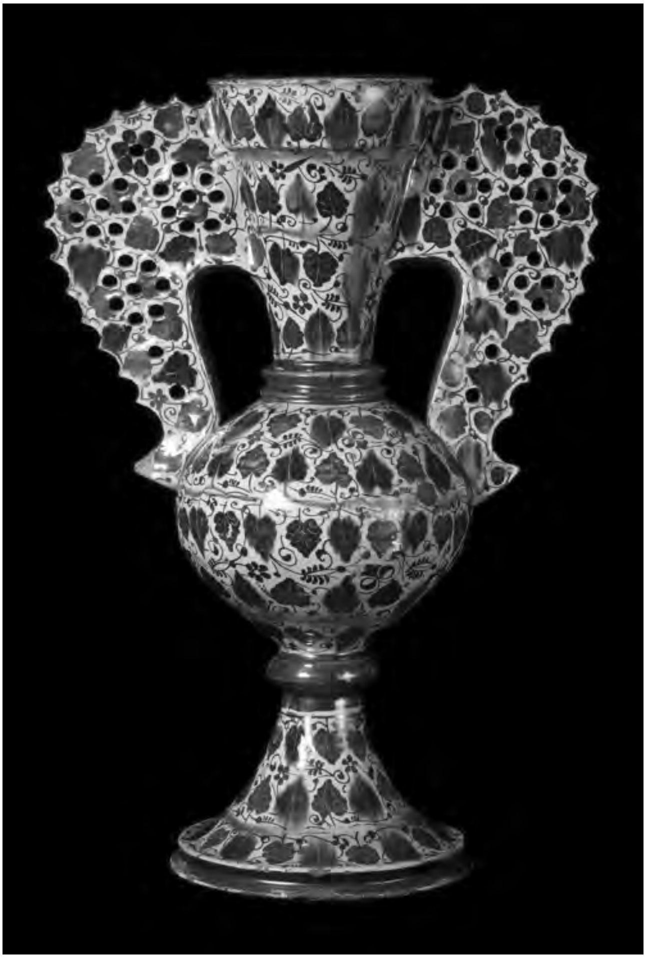

Figure 7.6.5a Flower vase, tin-glazed earthenware with lustre decoration, southern Spain, early sixteenth century CE, Victoria and Albert Museum, London. © Victoria and Albert Museum, London

new Islamic technology reliant on the application of a copper- or silver-based metallic glaze and which involved a third firing of the pot. Thus if we were to assess this pot 'across space', we would point out the geographically wide, horizontal make up of these pots, using, for example, tin from Cornwall, cobalt blue pigment from the Middle East, copper and silver from various parts of Europe. What makes these global lustrous artefacts central to this argument about periodization, however, is that their production relies also on a multiplicity of chronologically stratified technologies. As we discussed earlier, the transparent glaze beneath the metallic lustre is an ancient Chinese technology, while tin-glazing, which involves shrouding the clay body of the vessel in a white canvas-like coating is a technology that developed in the Middle East from as early as the ninth century and prospered during the Middle Ages. Thus these pots are both global and cross-temporal in their make-up, each layer stemming from a different time and place but coming together in a new, embodied and present whole.

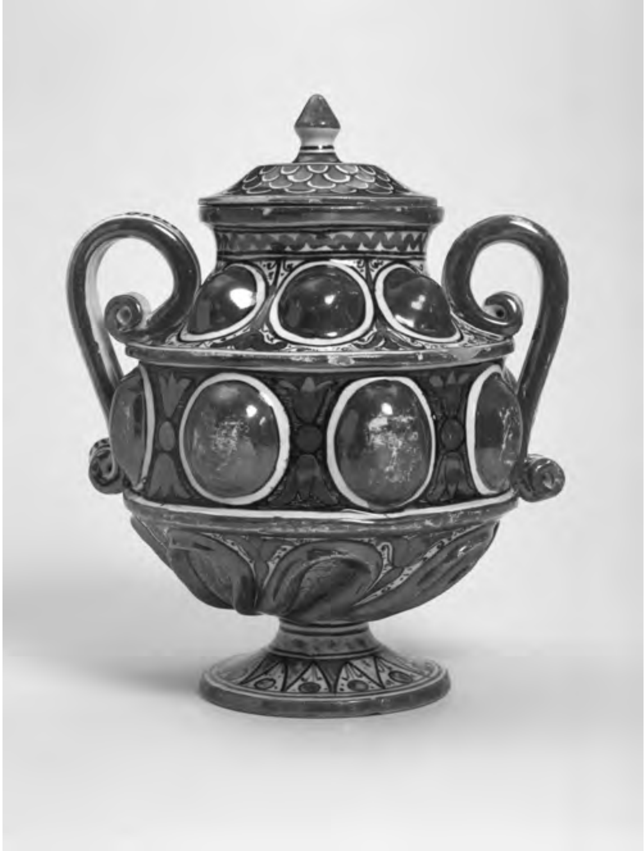

Figure 7.6.5b Attributed to Mastro Giorgio, vase, tin-glazed earthenware with lustre decoration, Italy, Gubbio, *c.*1510 CE, Victoria and Albert Museum, London. © Victoria and Albert Museum, London

By the early 1500s, these wares were successfully imitated by a select group of Italian potters (Figure 7.6.5b). The connection with their Islamic counterparts happened both through human and material contact, and we are also informed about the way in which the transmission of knowledge took advantage of recipes and was conscious of its non-local roots. This can be seen, for example, in a recipe recorded in a 'book of secrets' from Montelupo for '*dorato maiolicha*' or 'golden maiolica', 'which came from a rich Florentine merchant', where the link with Andalusia is made explicit: 'put it in the kiln for twelve hours with smoke-producing wood, in Valencia this is done with rosemary' (Berti 2003: 149–50). The material mimesis embedded in Italian lustreware might therefore be seen as a form of cross-cultural, cross-temporal material memory and action. When we dissect a cross-cultural object of this kind we can thus identify a multiplicity of horizontal, but also vertical forces at work, jointly responsible for its structural depth and complexity. Their literal, material layering and their metaphorical, historical depth can be seen to merge. Thus this lustrously glazed medium, whose distant precedents are not rooted in classical antiquity, complicates comfortable narratives about the Renaissance as a revival of Greco-Roman culture, and by doing so provides instead a window into an alternative chronological mapping of the period, one indebted to non-European material culture and infused instead with artisanal and technological continuities and connections over the *longue durée* and with the wider world.

Conclusion

In this chapter I have proposed that fifteenth- and sixteenth-century Italian lacquer and colour-glazed pottery, *arti* perceived as peripheral to the Italian Renaissance on the basis of their non-indigenous origins and by virtue of their alleged over-reliance on and inferiority to painting, should instead be seen as significant actors within global processes of material, technological and epistemological interconnectedness. I have suggested that we can inscribe this debate within a new critical framework of material mimesis, a phrase forged to capture the way in which many Italian Renaissance artisanal practices operated through continuous processes of mutual trans-material emulation, whereby an art strove to *look* and *be* like another, in a flow of constant transformation (Ajmar 2014).

My approach argues for shift from *looking at* to *looking into* cross-cultural objects, interrogating their structural, material complexity and temporal stratification and exploring their inter-connectedness not just as commodities in motion but as technological compounds relying on material mimesis. What would we find if we were to open up, to 'hold these objects up to the light' – as Renaissance natural philosophers proposed – and see into them, dissecting and scrutinizing their materiality and structural complexity through a lens sensitive not only to global connections across space, but also to historical stratification? And how can we assess the processes of layering of artisanal knowledge that ensured their continuity, durability and transformation as embodied processes and technologies moving across different historical contexts?

A culture of material mimesis might be seen as the emergent, dynamic context against which we should measure many practices of Italian artisanal emulation, particularly from the fifteenth century onwards, and this phenomenon might be understood as an active component of wider processes of artisanal epistemology whereby approximating another material might be seen as a manifestation of what has been defined as *making and knowing* (Smith *et al.* 2014). This impulse for material mimesis ought to be framed within a context of heightened artisanal experimentation, which might be seen as the result of many forces, including the increasing influx in the Renaissance of newly imported materials and artefacts whose make-up was not well understood, and of unfamiliar, new or newly discovered, material knowledge, developed through different forms of exchange, through human contact, written or material exchange, and within an increasingly global context. I want to argue that these factors tested the boundaries of the known, opening fresh questions and paving the way for novel artisanal practices involving the making of objects and the understanding of their materiality.

In conclusion, I have suggested a way of apprehending Renaissance cross-cultural artefacts predicated on structural complexity, engaging with processes of stratification that transform the separate ingredients – which often originate from different parts of the globe – into a new fused together product, revealing a novel wholeness. In these objects structural complexity equals technological stratification and is the result of both geographical width and temporal depth. These properties might simultaneously provide a distinctive template for connecting the materiality of these objects to a less expected value system for understanding and working with materials rooted in the non-European Middle Ages and the non-classical Antiquity, thus allowing us to question enduring geographical and temporal frameworks and the taxonomical approaches that label these objects within a mono-cultural, clear-cut space and time framework. This brings the material directly into the heart of globalization thinking (cf. Knappett and Jennings, both this volume) while at the same time it reveals a much more detailed, nuanced understanding of the complex processes that form globalization. By *looking into* these objects, opening them out, and inscribing them within strategies of material mimesis, we can start to unpick their structural complexity – where material and temporal layering can be made to coincide and their global interconnectedness can begin to emerge.

Acknowledgements

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7.7

France and the Enlightenment Mediterranean

Christopher Drew Armstrong

Introduction: Perrault's Mediterranean

In late seventeenth-century Europe, knowledge of global cultures and early human history was being woven into polemical works of a distinctly nationalist bent that pitted the achievements of modern individuals and states against what were sometimes regarded as relatively primitive ancient and non-Western groups. In his *Parallèle des anciens et des modernes* (1688–1692), for example, the French author Charles Perrault uses global travel and commerce as evidence of the chasm separating his contemporary world from antiquity. Ancient sailors "hardly dared to abandon the coasts of the Mediterranean," he claimed, while modern navigators "have established routes across the ocean that are as straight and true as our great roads and provide access to all places on the globe" (Perrault [1692–1697] 1979, 1: xxvii). Ancient ships, designed for the relative calm of the Mediterranean, could not rival the scale or sophistication of modern ocean-going vessels (Perrault [1692–1697] 1979, 4: 95). Recent astronomical techniques applied to the determination of longitude at sites on the Mediterranean coast of France demonstrated the "unbelievable" errors of earlier maps and ancient geographers (Perrault [1692–1697] 1979, 4: 83). Indeed, ancient knowledge of the world was itself largely confined to the Mediterranean basin and adjacent territories, limitations glaring to modern eyes after several centuries of global exploration.

Perrault's largely unsympathetic and dismissive representation of the Mediterranean world of antiquity, coupled with his manifest interest in contemporary achievements and global horizons belies the substantial efforts made by agents of the French crown to dominate the ancient sea, while French artists and scholars strove to absorb its cultural legacy. Perrault's text reveals that the *Querelle des Anciens et des Modernes* that tore apart the world of his contemporaries was as much about geography as it was about history. The ancient, the modern, the Mediterranean and the global were fused in reflections about the value of the remote past in a period of accelerating change, and the role of a variety of models both familiar and foreign in shaping contemporary identities and establishing new norms in an expanded, planetary context.

Whereas many of the essays in this volume address history *in* the Mediterranean during antiquity, this essay will address knowledge-making *about* the Mediterranean in France around 1700. Much of that knowledge concerned textile production in Languedoc, the activities of

Provençal merchants operating in the Levant, local politics in Ottoman controlled territories, and the affairs of Catholic missions in the Near East, but it also encompassed the collection of ancient artifacts and natural history specimens, the documentation of sites and the making of maps, all of which contributed to shaping new understanding of Mediterranean history, geography and cultures. In the late seventeenth and eighteenth centuries, French interests in the Mediterranean were managed from Versailles by a secretary of state for Maritime Affairs whose administration incorporated the kind of complex connectivity central to Tomlinson's definition of globalization (Tomlinson 1999: 24–25). As will become apparent in the course of this chapter, state agencies under the joint administration of the French department of Maritime Affairs and the Royal Household reflexively and recursively incorporated inputs from human agents into an array of administrative and scholarly projects. The huge array of materials collected, archived and transformed by this administration into usable forms of knowledge reveal the high degree of connectivity that bound individual agents of widely divergent backgrounds, interests and affiliations into a staggeringly complex web of relationships.

The management of information in various departments within the French state apparatus under Louis XIV have been the focus of several recent studies, notably Soll's examination of Jean-Baptiste Colbert's use of archives as a tool for shaping government policy (Soll 2009), and Rule and Trotter's study of the department of Foreign Affairs, its archives and the professionalization of its operations under Colbert's grand-nephew, Jean-Baptiste Colbert de Torcy (Rule and Trotter 2014). The department of Maritime Affairs and the Royal Household as an administration for information-management and knowledge-production is an aspect of McClellan and Regourd's *The colonial machine* (2011), which builds on a vast body of scholarship and archival materials to define components of the French administration that were established for scientific inquiry, focusing mostly on the half-century leading up to the French Revolution.

As expansive and thorough as McClellan and Regourd's study appears, a substantial component may be added to further complicate their analysis: the Mediterranean. Embedded in the system of institutions and government departments examined in *The colonial machine*, and core to the entire enterprise described therein was a network of sites around the Mediterranean Sea. Long before the construction of a French Atlantic (Banks 2002: 4), French trade outposts had been implanted around the Mediterranean, serving as staging points for the voyages of conquest and discovery of an earlier age. Relations between France and its Mediterranean neighbors were amplified and formalized throughout the early modern period. France was first among the Christian nations of western Europe to establish formal trade relations with the Ottoman empire and, based on claims dating back to the Crusades, the king of France throughout the early modern period styled himself as the protector of early Christian sites and Catholic missions established in Ottoman-controlled territories.

The Mediterranean and the French administration of Maritime Affairs

The goals of this chapter are complex, since it endeavors to contribute both to the themes outlined in this volume and to a recent resurgence of interest among English-language scholars in the place of the Mediterranean in French early modern history (Armstrong and Weiss 2015: 1–5). Like those authors, I aim to provide a corrective to work that has minimized or ignored the substantial presence of France in Mediterranean affairs during the early modern period. This chapter might be read as a supplement to the chapter in *The great sea* (2011) covering the period 1650–1780, in which Abulafia acknowledges French dominance in Mediterranean trade and triumph over British naval forces at Minorca in 1756 (Abulafia 2011: 488–503). Whereas

Abulafia's overarching concern was 'to describe the people, processes and events that have transformed all or much of the Mediterranean' (Abulafia 2011: xviii), my focus is on interactions between agents on the ground and their relationships with royal administrators at Versailles and elite scholars in Paris during the period leading up to the 'high' Enlightenment. Much attention was paid to the Mediterranean in those circles in the century before Napoleon embarked on his invasion of Egypt and Syria.

Rather than focusing only on what Braudel would call "surface disturbances" [*histoire événementielle*] like naval battles, it is the medium term, the history of institutions, "of groups and groupings" that is my primary interest here (Braudel 1972, 1: 21–22). The fact that it is currently necessary to work in archives in Paris and Nantes—not just Marseille—to grasp the full extent of French activity in the Mediterranean from the late seventeenth century speaks to both the modernization of the French state (in the form of centralized record-keeping) and the integration of the Mediterranean into larger global networks during that period. A full picture of these processes is one that emerges from the kind of multi-scalar methodology advocated by Feinman, in which the interplay of institutional structures and individual agents is conceptualized in terms of mutable networks responding to changing conditions—something critical to my understanding of the role of the state in shaping approaches to ancient material culture in eighteenth-century France.

Integrating the Mediterranean into both the French state administration and the early modern global economy was well underway before the eighteenth century. In *The Mediterranean and the Mediterranean world in the age of Philip II*, Braudel asserted that: "there is a *global* Mediterranean which in the sixteenth century, reached as far as the Azores and the New World, the Red Sea and the Persian Gulf, the Baltic and the loop of the Niger" (Braudel 1972, 1: 168). Nothing in Braudel's classic study, however, foreshadows the dominant role France would assume in the Mediterranean in the century leading up to the French Revolution. Although Braudel discovered that in the course of the sixteenth century, the state had become "the principal entrepreneur" within the Mediterranean, the French state was conspicuously absent (Braudel 1972, 1: 449). While merchant ships from Marseille could be found in ports throughout the Mediterranean, no strong industry existed in France to supply those merchants with goods for export. There was no French military navy to patrol Mediterranean waters and the Chamber of Commerce in Marseille appointed consular officials, not the French crown. Despite the formal trade treaty or *Capitulations* accorded to the French by the Ottoman Empire in 1515, Braudel's sixteenth-century Mediterranean extended to Lyon, not to Paris.

By 1700, the picture had changed dramatically. Of western European nations engaged in Mediterranean trade, France had become the dominant player (Masson 1911; Paris 1957; Eldem 1999: 4; Horn 2015). Braudel forecasts this shift, alluding to the role of Louis XIV's first secretary of state for Maritime Affairs, Jean-Baptiste Colbert, in restructuring the French administration and creating royal manufactures in the south of France for the production of textiles exclusively destined for Ottoman markets (Eldem 1999: 40–42). Although late seventeenth-century efforts to create a French Levant or Mediterranean trading company failed, Colbert's successors implemented a system that tightly controlled the activities of French merchants who operated in Ottoman ports (the *échelles du Levant*). In each *échelle*, consuls and their translators [*drogmans*] were progressively brought under the direct authority of the secretary of state for Maritime Affairs. The notion of "scaling-up" of local practices to create nested structures within global systems (Wilkinson 2006) captures the *ad hoc* process by which long-established commercial infrastructure concentrated around the Mediterranean and managed from Marseille became embedded in a state department for Maritime Affairs managed from Versailles and responsible for overseeing French colonies and international trade.

In addition to corralling French merchants into cartels for the sale of textiles, the consuls reported regularly to the secretary of state for Maritime Affairs on everything deemed note-worthy that happened within their jurisdictions. Extraordinarily fine-grained knowledge of local politics emerges from the correspondence of the most zealous consuls who worked ceaselessly to negotiate ongoing relationships with Ottoman administrators, regional potentates, religious officials, and merchants of all nationalities. The density of French consulates in the Mediterranean was unparalleled in any other part of the world and no other nation managed so complex a system (Mézin 1997). The French Mediterranean world of the eighteenth century might be pictured as a constellation of points scattered along coasts, linked across the waters and to inland centers via well-established caravan routes extending far afield into Asia and the Indian Ocean. The brightest star in this constellation was Paris, towards which information and artifacts were channeled in regular and reliable flows. The Mediterranean territories under Ottoman domination constituted a clearly defined compartment within the department of Maritime Affairs, which administered French colonies in North America and the Caribbean, and the outposts of state trading monopolies in Madagascar and India (Pritchard 1987; Banks 2002; Pritchard 2004: 230–41). One can thus speak of a French Mediterranean in the eighteenth century within a larger administrative framework with a global reach if not quite imperial ambitions.

There is little need to emphasize that in the early modern era, other western European states such as Spain, Portugal, and England also endeavored to manage increasingly complex commercial networks at a global scale, or that transportation and communication technologies imposed significant limitations on the scope of these administrations. What made the French system exceptional was coupling the administration of global trade with a host of state-funded scholarly institutions in Paris, which disseminated knowledge to international audiences through print media. Consequently, French state institutions such as the royal academies played an important role in shaping contemporary consciousness of the world as a whole, another facet of early modern globalization that presages more recent developments (Robertson 1992: 8). In the eighteenth century, French had become a major language for science and diplomacy, while peer nations such as England regarded the French administration as a model for promoting scholarly inquiry (Drayton 2000: 74–78). By 1700, French intellectuals and administrators would have been comfortable with the notion that they lived in a global village, one they had a strong hand in shaping. In a statement prefiguring Marshall McLuhan, one prominent member of the Académie des Inscriptions already saw that new technologies enabling global navigation and maritime commerce had transformed the world into "a single town in which everyone knows everybody else" (Falconet 1746: 634).

Tournefort's Mediterranean

Inherent in the workings of the French state apparatus by 1700 was the process of knowledge accumulation and correction described by Latour in his analysis of 'centers of calculation' (Latour 1987). Focusing on the apparent disparities between knowledge that is implicit, local, and fuzzy, and knowledge that is explicit, universal, and precise, Latour emphasizes the development of methods for recording information and collecting specimens during voyages in order to make things mobile, stable, and combinable. These methods often required the use of precision instruments or knowledge of classificatory systems, implying the involvement of an array of individuals specially trained for this work. Such individuals act as agents of central knowledge-making institutions, the materials they gather being aggregated into collections such as herbaria or transformed into documents such as maps. These collections and documents serve to train specialists and travelers who subsequently participate in the cycle of accumulation and aggregation.

This study of how knowledge about the Mediterranean was produced in the early modern period builds on the methods outlined in this volume, with the difference that, instead of examining how ideas about connectivity and networks inform our current understanding of ancient cultures (e.g. Jennings and Knappett, both this volume), I am interested in understanding how ancient artifacts and texts circulated within interlocking networks of trade, administration, and scholarship in the early eighteenth century. This period is of particular interest since it was during the eighteenth century that the foundations of Mediterranean archaeology as a scholarly discipline began to be established. At the same time, the contours of the nation-state had begun to take shape and major western European powers were in the process of constructing trade networks and colonial empires on a global scale. Though the technologies used to maintain these linkages were fragile and communications were slow, the *philosophes* of the Enlightenment viewed the earth as a complete, knowable entity, its major land masses, islands, and seas embedded in a grid of meridians and parallels that gave precise definition to those expanses of *terra incognita* that merely awaited some intrepid traveler to chart them (Godlewska 1999: 21). The Mediterranean was fully incorporated into the larger, eighteenth-century enterprise of remapping the world based on rigorous mathematical and astronomical techniques, and cataloging its productions according to universalizing taxonomies and nomenclatures.

One consequence of highlighting the networked qualities of early modern research is the breaking down of disciplinary silos (Morris 2005) that do not map directly onto early modern structures or epistemological categories. In the early modern period, far greater connectivity existed between individuals working in what would now be considered very distant disciplines. University-educated physicians, for example, combined knowledge of ancient languages (Greek and Latin) with training in visual studies (anatomy and botany), thus potentially drawing natural history and antique material culture together into a single disciplinary frame. From the Renaissance into the nineteenth century, academically trained painters and sculptors drew on ancient Greek and Roman models and the study of ancient Mediterranean (mostly Italian) sites and monuments was an integral component of elite architectural practice. Any attempt to understand connectivity in the eighteenth-century Mediterranean necessarily cuts across fields including the history of science and cartography; the history of art and material culture; the history of commerce and diplomacy.

An outstanding instance of the kind of individual who operated within the French administrative system around 1700 and whose work bridged disciplines that might be characterized as fundamentally visual in nature is the physician and botanist Joseph Pitton de Tournefort. In 1699, the secretary of state for Maritime Affairs and the Royal Household, Jérôme Phélypeaux, ordered Tournefort to travel to the Levant to make "observations of natural history, ancient and modern geography, and also to gather information related to the commerce, religion and customs of the different peoples in the region" (Tournefort 1717, 1: 1). In addition to traveling with books and maps, Tournefort was accompanied by the skilled botanical illustrator, Claude Aubriet, and the German physician Andreas Gundelsheimer.

Trained at the prestigious Université de Médecine in Montpellier, Tournefort contributed to elaborating a nascent system of state-sponsored scientific research that served as a model for later exploration. In its planning and objectives, Joseph Banks's now paradigmatic voyage to the Pacific during James Cook's first circumnavigation (1768–1771) (Miller 1996: 21–37) differs little from Tournefort's 1700–1702 voyage to the Levant. Such a parallel should not be surprising or controversial: Tournefort's name was a byword for modern scientific enquiry throughout the eighteenth century. No modern author is more frequently referenced in the *Encyclopédie* (Edelstein 2010: 49–50) and the entry "Voyageur," published in 1765, includes Tournefort among the most prominent travelers whose work contributed to establishing new scientific understanding of the world (Fontenelle 1740, 1: 169–89; Heim 1957; Constantine 1984: 52–65).

As impressive as Tournefort was as a scholar and traveler, his work gained currency in the context of a state system that was already in place and contributed substantially to shaping his research. In 1683 he was appointed *professeur de botanique* at the Jardin du roi in Paris, providing him with a platform for elaborating his ideas and allowing him to extend his researches to Spain, Portugal, Holland, Britain, and the Levant and thus to establish an international network of contacts. In 1691 he was appointed to the Académie des Sciences, placing him in direct contact with leading French scholars and key figures in the royal administration. The capstone of Tournefort's official career was his appointment as Professor of Medicine and Botany at the prestigious Collège royale in 1706. At both the Jardin du roi and the Collège royale, lectures were free and could be attended by anyone.

Throughout his *Relation d'un Voyage du Levant*, Tournefort refers to ancient authors such as Diodorus, Herodotus, Strabo, and Theophrastus whose descriptions of plants and geography he frequently compared to the sites he visited. A sense of recent change or deep continuity emerges from references to published works of more recent authors, such as Pierre Belon, François Savary de Brèves, Jean de Thévenot, Jacob Spon, and George Wheler. Before leaving Paris, Tournefort spoke with the linguist and translator Antoine Galland of the Académie des Inscriptions, who accompanied the French ambassador Nointel to Constantinople and on extensive voyages to sites throughout Greece, the Aegean and the Near East in the years 1670 to 1675 (Vandal 1900; Omont 1902, 1: 175–221). On the island of Paros, Tournefort drew on his earlier visit to Oxford, where he saw the Arundel Marbles. The depth of sources available to Tourenfort as he prepared for his voyage and wrote his account highlights the most distinctive aspect of the Mediterranean: the possibility of comparing descriptions of sites and cultures made over long periods of time. Such a method could not be applied in the context of later Pacific exploration. Antiquities and ancient authors were thus key sources for contemporary scholars working in the Mediterranean, and physicians such as Tournefort were especially well placed to grapple with these materials, since medical instruction required competence in Latin and Greek.

In the course of their travels, Tournefort and his colleagues met with a number of French consuls and Capuchin monks who provided them with shelter and guidance. In Constantinople they were housed at the French embassy, where Tournefort mentions the "enfants de langue, " French orphan boys shipped from Paris to Constantinople where they were trained in Turkish, Arabic, and other Near Eastern languages under the supervision of Capuchin monks, preparing them for service as interpreters in the French consulates (Tournefort 1717, 1: 508; Bély 1990: 349–50). In several instances, "Oriental" hosts, officials, and informants proved indispensable. On Crete, Tournefort admired the gardens of the Ottoman governor at La Canée, spending time there to inspect citrus trees and other specimens of interest (Tournefort 1717, 1: 25). Tournefort was also impressed by Turkish establishments that provided food and lodging free of charge to travelers (Tournefort 1717, 1: 36). The extensive diplomatic, commercial, and religious infrastructure already in place, consisting of establishments maintained by both western European nations and Ottoman authorities, greatly facilitated Tournefort's mission and is another distinctive feature of the early modern Mediterranean that differentiated it from the Pacific.

Delisle's Mediterranean

It is clear from Tournefort's account that antiquarian studies were integral to his own research and were supported by various state institutions managed by the French department of Maritime Affairs and the Royal Household. Ancient material culture had been a part of elite collecting and research throughout Europe since at least the Renaissance, but what is revealed by

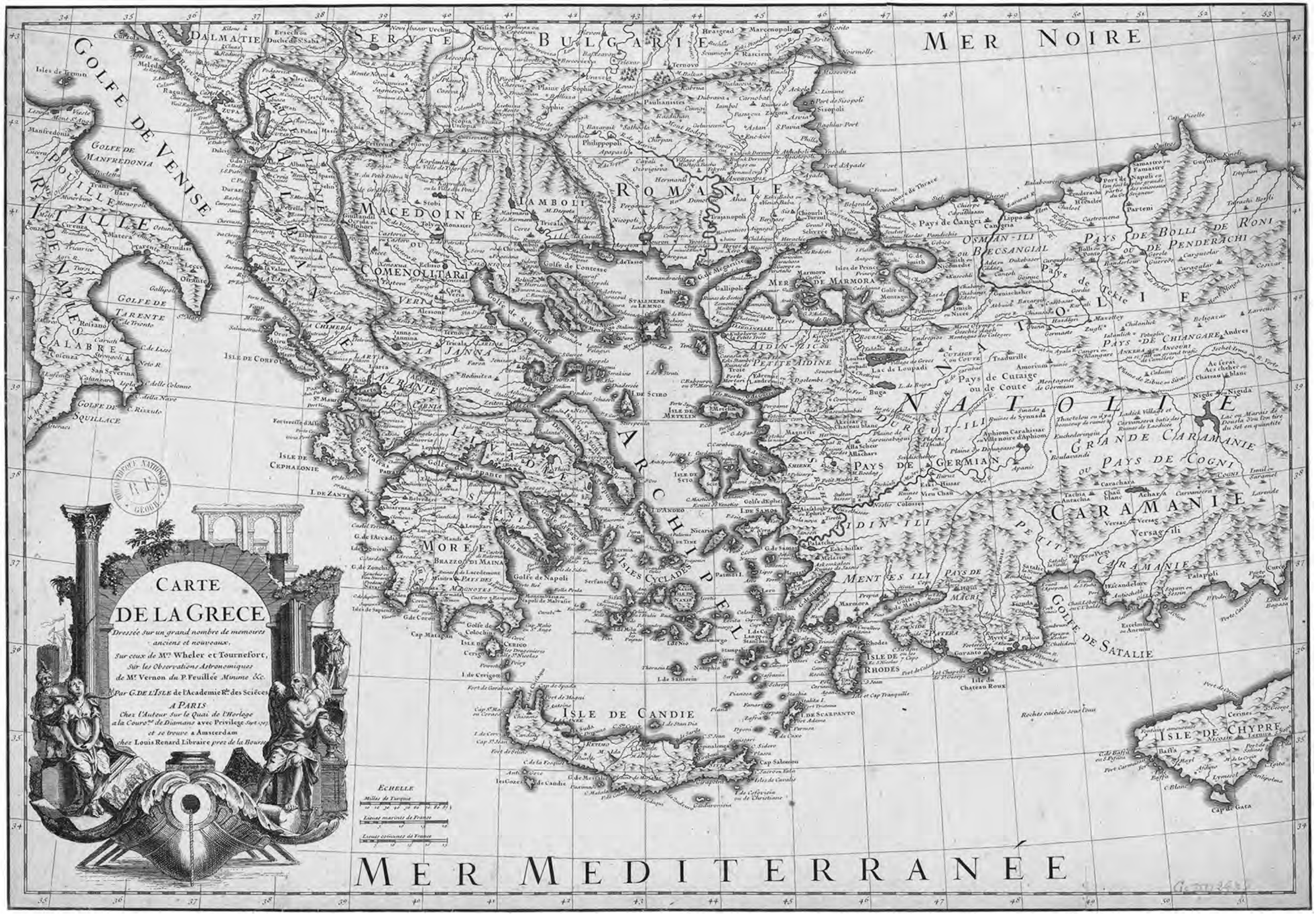
CARTE
DE LA GRECE
Dressée sur un grand nombre de memoires anciens et nouveaux.
Sur ceux de Mrs. Wheler et Tournefort,
Sur les Observations Astronomiques
de Mr. Vernon du P. Feuillée Minime &c.
Par G. DE L'ISLE de l'Academie Rle. des Sciéces
A PARIS
Chez l'Auteur sur le Quai de l'Horloge
a la Courone de Diamans avec Privilege Sept. 1707
et se trouve a Amsterdam
chez Louis Renard Libraire prez de la Bourse
ECHELLE
MER NOIRE
MER MEDITERRANÉE
GOLFE DE VENISE
BULGARIE
SERVIE
DALMATIE
ROMANIE
MACEDOINE
ALBANIE
ITALIE
NATOLIE
ARCHIPEL
LIVADIE
MOREE
ISLE DE CANDIE
ISLE DE CHYPRE
RHODES
CARAMANIE
GOLFE DE SATALIE
ISLES CYCLADES
ISLE DE CORFOU
ISLE DE CEPHALONIE

Figure 7.7.1 Guillaume Delisle "Carte de la Grèce, dressée sur un grand nombre de mémoires anciens et nouveaux, sur ceux de Mrs. Wheler et Tournefort, sur les observations astronomiques de Mr. Vernon du P. Feuillée Minim etc.," (1708 CE. Source : Bibliothèque nationale de France, département des Cartes et Plans, GE DD 2987 (5982)

a detailed examination of French scholarship in the first half of the eighteenth century is how closely this research was tied to larger scientific projects in both the Mediterranean and global contexts. The ultimate question here is to probe the ways that globalization theory might provide new insights into the ways that information-gathering and knowledge-production about Mediterranean antiquity were shaped in a world increasingly conscious of its own interconnectivity – an awareness keenly felt within scholarly circles and government bureaus alike. Bringing those two worlds together was a key achievement that positioned France as a leader in scientific inquiry—especially those fields that required long-term financial support for the management of collections and institutional networks for facilitating travel.

Tournefort's voyage proved especially useful for demonstrating the applicability of his system of botanical classification to the flora he discovered in the Levant and Caucasus. Most of the 1,356 new plant species he gathered could be slotted into his system, which, before Linnaeus, was widely respected and until 1774 served for organizing plants cultivated at the Jardin du roi. Tournefort's classificatory system and his comparative approach, like Perrault in the *Parallèle*, often emphasized the chasm between his methods and the "ignorance" of local individuals. In his *Relation*, the kind of local, fuzzy knowledge described by Latour meets the universal, precise scientific traveler armed with observations recorded by earlier writers. This dichotomy is made apparent at the beginning of Tournefort's narration, in which vague estimates of the distance from Marseille to Crete made by Mediterranean pilots (1,500 miles? 1,800 miles?) show that the exact length of a mile was itself a matter of guesswork.

While Tournefort's voyage served in part to show how knowledge about Mediterranean botany was part of a larger, global system of classification, his examination of the geography of the ancient sea was more perfunctory in nature. Though he included maps in his *Relation* and describes the methods and instruments used to make his observations, he did not seek to integrate that data into any larger system. That work was done by one of his colleagues in the Académie des Sciences, the *géographe du roi* Guillaume Delisle, who incorporated details gleaned from the work of numerous travelers into maps of Mediterranean territories and other parts of the world. Through these documents, we can perceive the workings of the early modern "center of calculation" in the guise of the French royal academies and collections, which centralized knowledge accumulation in Paris and, through the work of elite scholars, transformed it into usable formats. Typical of the eighteenth-century "géographe de cabinet," Delisle compiled his data from various sources and did not travel himself (Godlewska 1999: 39–48).

Thus, in a "Carte de la Grèce" printed around 1708 (Figure 7.7.1), Delisle cites Tournefort along with the British traveler George Wheler, whose detailed survey of Attica made in 1675 appeared in both the English and French editions of his *A journey into Greece* (1682; French 1689). Wheler's map itself integrated the latitudes of sites established by another British traveler, Francis Vernon, who published the results of observations made during his voyage from Venice to Smyrna [Izmir] in the *Philosophical transactions* of the Royal Society of London (1675/6). Even before Tournefort's voyage, Delisle had contributed to radically altering contemporary understanding of the Mediterranean in a sensational *mappemonde* published in 1700 (Figure 7.7.2). According to the perpetual secretary of the Académie des Sciences, Bernard Le Bovier de Fontenelle, Delisle's map revealed:

> A Mediterranean shorter by a quarter than what was previously thought . . . M. Delisle, to leave no doubt, measured the entire length of this sea in detail and all its parts . . . all this he evaluated with the appropriate precautions, reduced to a common scale and assembled to bring into conformity with known astronomical observations.
>
> *(Fontenelle 1740, 2: 286)*

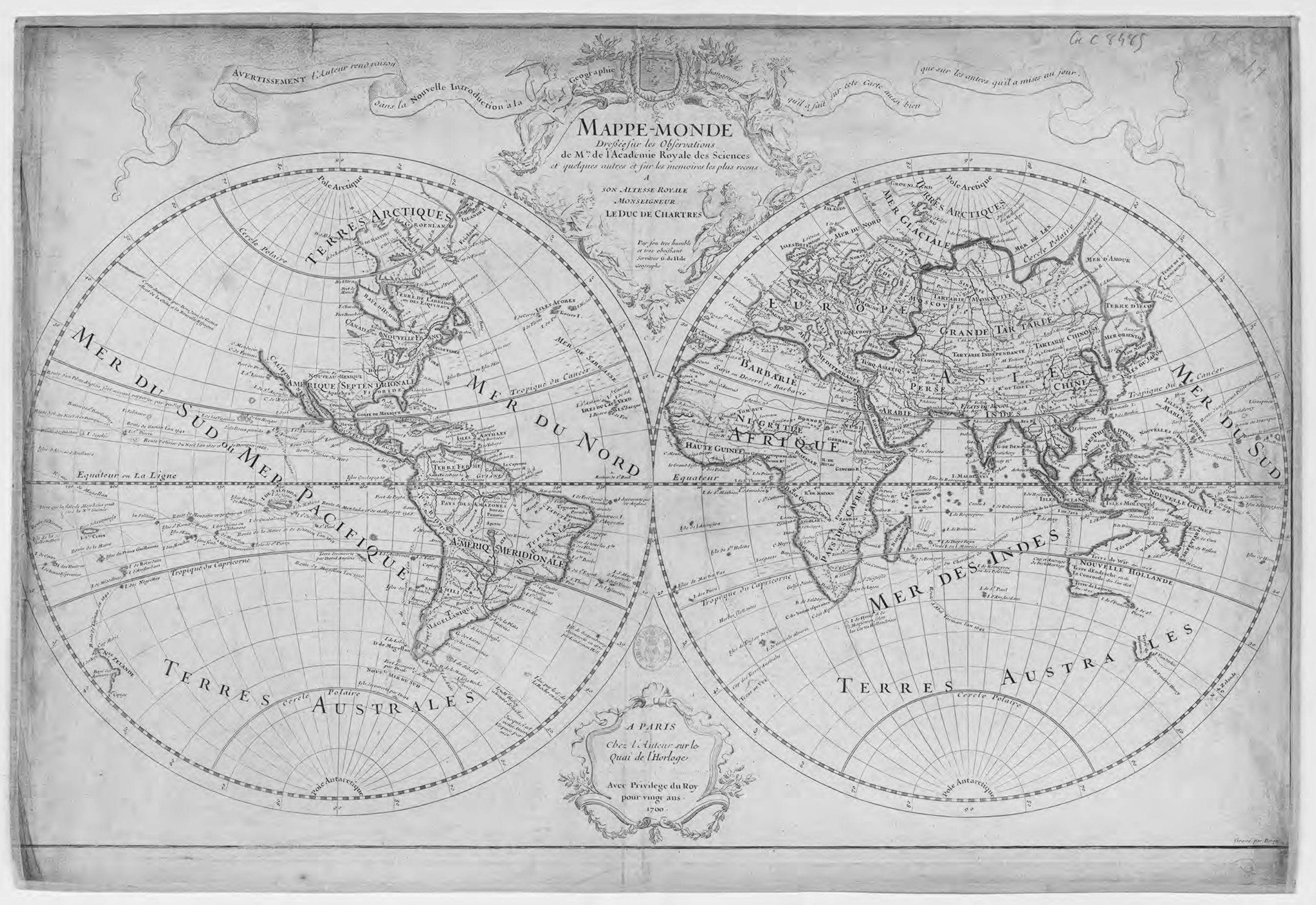
Avertissement l'Auteur rend raison dans la Nouvelle Introduction à la Geographie des changemens qu'il a fait sur cette Carte aussi bien que sur les autres qu'il a mises au jour.
Mappe-monde
Dressée sur les Observations
de Mrs. de l'Academie Royale des Sciences
et quelques autres et sur les memoires les plus recens
A
Son Altesse Royale
Monseigneur
Le Duc de Chartres
Par son tres humble et tres obeissant Serviteur G. de l'Isle Geographe
Pole Arctique
Terres Arctiques
Cercle Polaire
Mer du Sud ou Mer Pacifique
Mer du Nord
Tropique du Cancer
Equateur ou La Ligne
Tropique du Capricorne
Terres Australes
Pole Antarctique
Mer Glaciale
Europe
Asie
Grande Tartarie
Chine
Perse
Arabie
Inde
Barbarie
Nigritie
Afrique
Haute Guinée
Equateur
Mer des Indes
Nouvelle Hollande
Amerique Septentrionale
Amerique Meridionale
A Paris
Chez l'Auteur sur le Quai de l'Horloge
Avec Privilege du Roy pour vingt ans
1700

Figure 7.7.2 Guillaume Delisle, "Mappe-monde Dressée sur les Observations de M^{rs}. de l'Académie Royale des Sciences et quelques autres et sur les memoires les plus recens," (1700 CE). Source: Bibliothèque nationale de France, département des Cartes et Plans, GE C-8485

Half a century after its appearance, the authors of the *Encyclopédie* regarded Delisle's *mappemonde* as a work that announced the spirit of the Enlightenment.

In the eighteenth century, the French administration went much further in coordinating this kind of geographic work for the production of scientifically accurate maps than any other nation. Delisle's work was built on observations compiled by numerous prominent and subaltern figures, unacknowledged in Fontenelle's necrology of the hero-academician cited above. The connectivity that characterized the French Maritime administration is revealed by an array of references in correspondence that shows the degree of awareness within the system of current issues and interests of its various members. For example, in a letter written on May 23, 1708 to the Secretary of State Phélypeaux, the consul in Tripoli in Libya, Claude Le Maire, mentioned in passing that: "I'm working on a little study about this country that will be of interest to M. Delisle and that I'll send to *Votre Grandeur* before my departure" (Archives Nationales, Paris A.E. B^I 1090, fol. 80r). On August 16, Le Maire sent his notes to Delisle, which included information about Libya and Sudan, territories the consul knew in some detail from his own travels (Archives Nationales, Paris A.E. B^I 1090).

Le Maire's correspondence reveals one of the many vectors by which Delisle received data for compiling maps. Other French consuls also helped to facilitate the work of scholars involved in mapping projects. From 1721 to 1726, the Jesuit missionary Claude Sicard undertook extensive research funded by the French crown to map the course of the Nile. Two draftsmen (Duhamel and Marquis) and an engineer (Bigonet of Marseille) were sent from France to help with his work. Such research could be perilous: Sicard died of plague in 1726 before completing his map. Recognizing the value of Sicard's work, the Consul General in Cairo, Pierre Expilly, took immediate action upon learning this news, dispatching his agents to collect Sicard's papers to have them shipped back to France (Archives Nationales, Paris A. E. B^I 320).

Chazelle's Mediterranean

Delisle's cartographic work and Tournefort's voyage to the Levant were deeply embedded in ongoing research projects sponsored by or connected to the French royal administration. These projects built on a rhetoric crystallized in Perrault's *Parallèle* that contrasted flawed knowledge-making about the Mediterranean produced by local individuals, with systematic, universal knowledge-production that was the hallmark of modern scientific inquiry cultivated by the French crown through the royal academies in Paris. Delisle's *mappemonde* could not have been produced without painstaking work to establish the longitudes and latitudes of given sites around the Mediterranean. Unacknowledged in Fontenelle's necrology of Delisle is the work of the astronomer Jean-Mathieu de Chazelles, who in 1693 was sent to the Levant by the secretary of state Louis Phélypeaux to make precise astronomical observations in order to correct the official maps of the Mediterranean used by the French navy.

Closely connected to figures in the Académie des Sciences and the Royal Observatory who had done similar work on the Atlantic coast and produced a "corrected" map of France in 1682 (Figure 7.7.3), Chazelles in 1691 identified the need for work in the Mediterranean to correct hydrographic maps, stating that:

> It is amazing that maps of this sea, that has always been traveled, are more imperfect than those of the New World, which has only been known for two centuries. But if we compare techniques used to navigate in the Mediterranean with those used to cross the ocean, the reason for this difference becomes apparent.
>
> *(Archives Nationales, Paris Marine 3 JJ 13)*

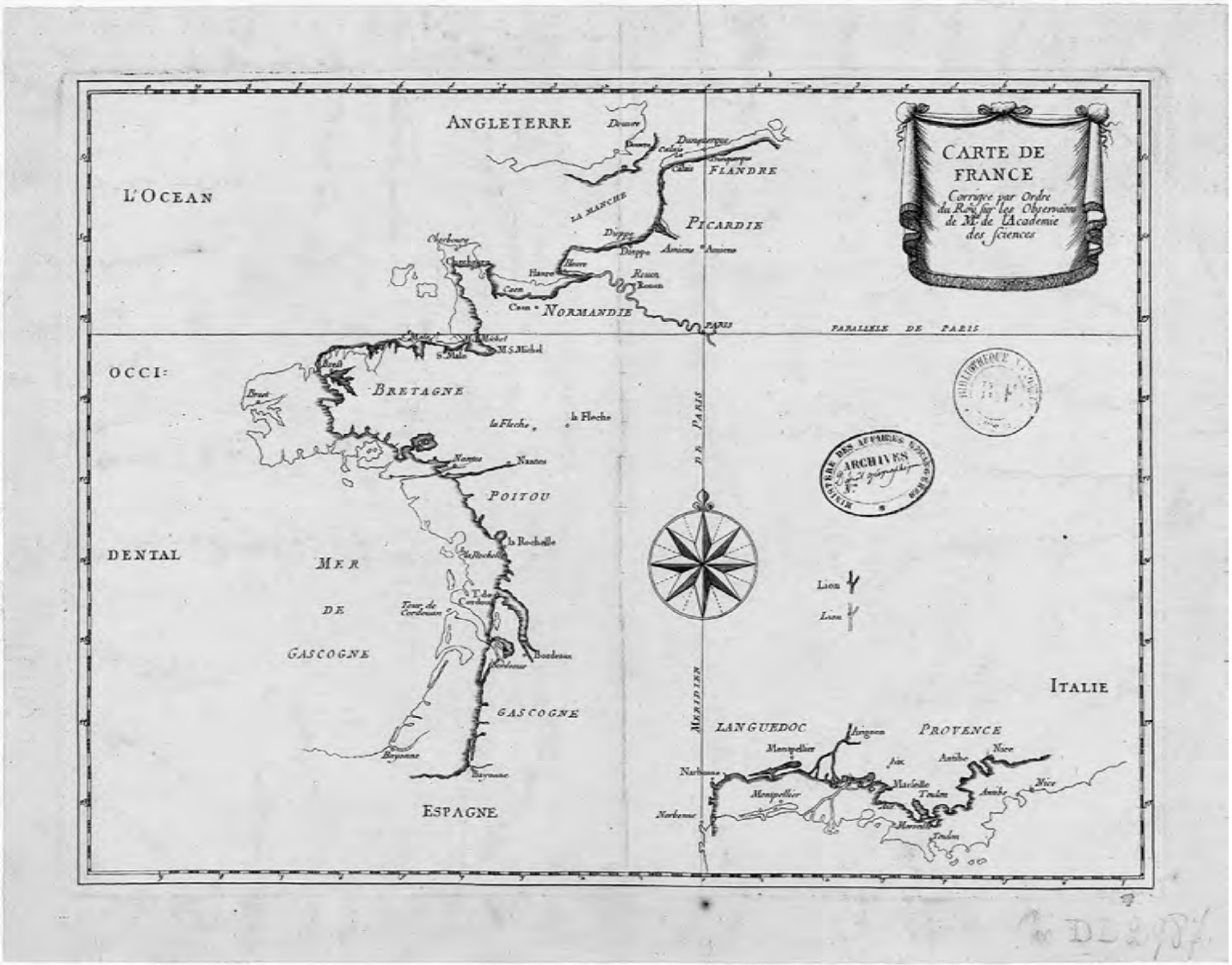

Figure 7.7.3 “Carte de France corrigée par ordre du Roy sur les observations de M^{rs}. de l’Académie des Sciences” (1693 CE). Source : Bibliothèque nationale de France, département des Cartes et Plans, GE DD 2987 (777)

Like Tournefort and Perrault, Chazelles claimed that the lamentable state of geographic knowledge of the Mediterranean was due to the poor training of Provençal pilots, who were not accustomed to making astronomical observations or using instruments for navigation.

During his voyage to the Levant, Chazelles determined the longitudes of Alexandria, Cairo, Rosetta, and Damietta in Egypt, plus Alexandretta, Rhodes, and Constantinople. His work was based on observations of the satellites of Jupiter following tables established by Jean-Dominique Cassini under whose direction Chazelles studied in Paris. In Egypt, Chazelles measured the bases of the pyramids at Giza, important material evidence of the lengths of ancient units of measurement. Knowledge of the length of ancient units of measurement was essential for interpreting authors such as Herodotus, Diodorus, or Ptolemy, whose texts were still used by geographers in the eighteenth century to determine distances between sites in territories around the Mediterranean and in the Near East.

Fréret's Mediterranean

In his chapter in this volume, Jennings identifies eight trends that occur in modern globalization. "Standardization" is perhaps the most significant of Jennings's trends that can be mapped onto the emergence of archaeology as part of scientific discourses in the eighteenth century. Standardization was a core purpose of the French royal academies. The first of these, the Académie française created by Cardinal Richelieu in 1635, worked to perfect the French language and to establish the definition and orthography of words through the production of a dictionary. For the work of scientists and scholars involved in disciplines that impinged on proto-archaeology, scale comparisons of material artifacts and establishing the location of ancient sites in relation to the geography of the modern world involved thinking about standardization of systems of measurement (Withers 2008: 120). Broadly speaking, measurement, scale comparisons and the geo-localization of sites were preoccupations for scholars in both the Académie des Sciences and the Académie des Inscriptions, the latter being the principal institution for the study of antiquity in eighteenth-century Europe.

Throughout the eighteenth century, French scholars made significant efforts to establish the relationships among a host of different units of measurement used by ancient authors and to express these in modern units (Armstrong 2011: 68–86). Material culture played an important role in this work: ancient Roman milestones discovered in the south of France and a number of representations of ancient Roman feet preserved in Italian collections were meticulously analyzed. Where possible, members of the academies carried out these examinations in person and the best modern instruments were embarked to remote sites for this work. Their results were published in official volumes of academic history and thus made available to scholars throughout Europe and farther afield. The most authoritative eighteenth-century maps of regions around the Mediterranean included multiple scales in both ancient and modern units. Well before the French Revolution and the invention of the metric system, scientists and administrators lamented the absence of consistent, rational standards of measurement; for the purposes of mapping continental Europe, the French standard unit of length used in surveying—the *toise*—was a piece of French cultural policy that was insinuated into scientific mapping of the Habsburg territories and the Papal states through the mediation of ambassadors and scientists.

The work of Nicolas Fréret, a prominent member of the Académie des Inscriptions, complemented the work on the geography of the Mediterranean described above. In the first half of the eighteenth century, he was one of the major figures who contributed to the renovation of studies of the ancient geography of the Mediterranean Sea. In his necrology of Fréret, Jean-Pierre de Bougainville stressed the importance of his work for geography and the novelty of Fréret's methods. Fréret combined recent techniques in astronomy for the determination of longitudes and latitudes of sites with data from ancient textual sources to better understand the extent of Greek and Roman knowledge of the world. According to Bougainville, Fréret

> studied a multitude of ancient and medieval authors for everything they had to say about geography. Using travelers' accounts, a large number of pilots' journals, numerous portulans, and all known itineraries, he also included astronomical observations and tables of longitudes and latitudes.
>
> *(Bougainville 1756: 326)*

Fréret frequently presented his work on ancient geography at meetings of the Académie des Inscriptions beginning in 1723 and together this material was published as "An essay on ancient units of measurement for distances" in 1756. Among the novel techniques he developed to determine the length of ancient units of measurement was to express distances recorded by ancient authors in terms of degrees of longitude. Thus, while no modern navigator had made precise measurements of the southern coast of Asia Minor, this length was known in terms of the number of degrees of longitude between Rhodes and Alexandretta. Herodotus and Xenophon both gave this distance in terms of Greek *stades*; both also provided estimates of the circumference of the earth using the same ancient units of measurement. Fréret compared this data to recent estimates of the circumference of the earth made by French scholars to show that ancient astronomers had determined this dimension with a certain degree of precision and to establish an approximate length for the ancient Greek *stade* in modern units. This technique could not be used to evaluate terrestrial distances in ancient texts before the late seventeenth century, when good telescopes and tables of the eclipses of the moons of Jupiter made it possible to establish fairly accurate measurements of longitude.

According to Fréret, knowledge of the length of ancient units of measurement expressed in terms of modern units was essential for understanding Greek and Latin authors. His work impressed contemporaries such as d'Alembert and Turgot, and was the basis of the article "Distance measurement" ["mesure longue"] in the tenth volume of the *Encyclopédie*. Fréret conducted his work in parallel with that of Jacques II Cassini who, while surveying in the south of France, compared distances measured between towns in Languedoc with the distances expressed in Roman miles that were recorded by ancient Latin authors.

Fréret's work, while acknowledging the superior instruments and mathematical techniques at the disposal of modern scholars, nonetheless sought to vindicate ancient scholars belittled by Perrault and his partisans in the *Querelle des Anciens et des Modernes*. Fréret met his adversaries on their own ground, incorporating modern astronomical techniques into his research by comparing recent observations of the latitude of sites to those recorded by ancient authors. In a text presented to the Académie des Inscriptions in 1744, Fréret demonstrated that ancient measurements of latitude were remarkably precise by comparing the figures reported by the ancient Roman author Vitruvius for Alexandria (31° 11' 59") to observations made by Chazelles (31° 11' 20"), concluding that ancient evaluations were reliable when modern sources were absent or contested. Through his examination of ancient sources, Fréret demonstrated that ancient scientists were precursors of the moderns in this work. At the same time that a history of ancient art was emerging in the work of other members of the Académie des Inscriptions (such as the Comte de Caylus), Fréret began to establish a critical history of ancient science linked to modern standards of measurement and global geo-location.

Conclusion: Buache's Mediterranean

If one document can represent how the French administration instrumentalized complex connectivity in the eighteenth century and can serve as an emblem of early modern globalization, it might be the arresting composite map of the Mediterranean Sea produced in 1735 for Jean-Frédéric Phélypeaux, Comte de Maurepas, who inherited the charge of secretary of state for Maritime Affairs and the Royal Household from his father and grandfather Jérôme and Louis Phélypeaux de Pontchartrain (Armstrong 2014) (Figure 7.7.4). Drafted by the cartographer Philippe Buache for the Dépôt des Cartes, Plans et Journaux de la Marine, the map represents the coasts of the Mediterranean, highlighting the need for the production of an up-to-date printed map for the use of contemporary sailors.

How to understand the making of this map except as the product of complex connectivity harnessed by a centralizing administration? Emphasizing connectivity here implies at least two things. First, rather than isolating or highlighting individual agents, their activities are presented in relation to evolving administrative systems and intellectual networks. Both elite and subaltern figures are integral players within the complex, unpredictable and difficult to manage processes of data-collection and knowledge-making characteristic of early modern administrative and scholarly systems. It is easy to see the images, maps, books, and collections that were created in the early modern period as the inevitable, finished results of some exceptional mastermind; without completely abandoning notions of authorship, the method proposed here attempts to demonstrate how the research potential of networked individuals was harnessed in early modern contexts to produce documents, representations and other forms of knowledge that were understood to be contingent and open to revision. Buache's 1735 composite map of the Mediterranean was just such a compilation based on the work and expertise of numerous agents. In its published form, users of the map were solicited to provide data for the production of future maps that would ultimately be more accurate. This explicit call for information makes it clear that participation in knowledge-making networks could be open-ended, casual, and self-motivated. The 1735 map itself established the parameters for what kind of information was needed for its rectification.

The distinctive quality of the network required to produce the 1735 composite map of the Mediterranean is captured by Latour's concept of the "center of calculation," the functioning of which is nowhere more fully illustrated than in the French department of Maritime Affairs and the Royal Household in the early eighteenth century. In order for networks to produce knowledge deemed of utility to the network, some of its nodes must be repositories into which many agents feed data. Thus, while many agents of varying degrees of competence might feed data into this repository, the specialists in the repository were positioned to assess the utility of a given piece of data by comparison with a huge body of similar material.

As a consequence of administrative centralization and state intervention into local economies throughout the French sphere of influence, Paris served as the point of reference for the 1735 map of the Mediterranean—though it is not in fact represented on the document. The hegemony of Paris over Marseille was established through control over systems of knowledge-production, which include knowledge about the geography of the world and the Mediterranean Sea. Buache's 1735 composite map of the Mediterranean superimposed a new outline of the Mediterranean in red, over the contours in yellow of the Mediterranean according to the "defective" standard map published in 1693 by François Berthelot and dedicated to the mayor, councilors, and deputies of Marseille. The "corrected" map was produced in Paris for the French crown. It was centered on the Royal Observatory, one of the principal centers of astronomical and geographic knowledge-production marking the (French) prime meridian from

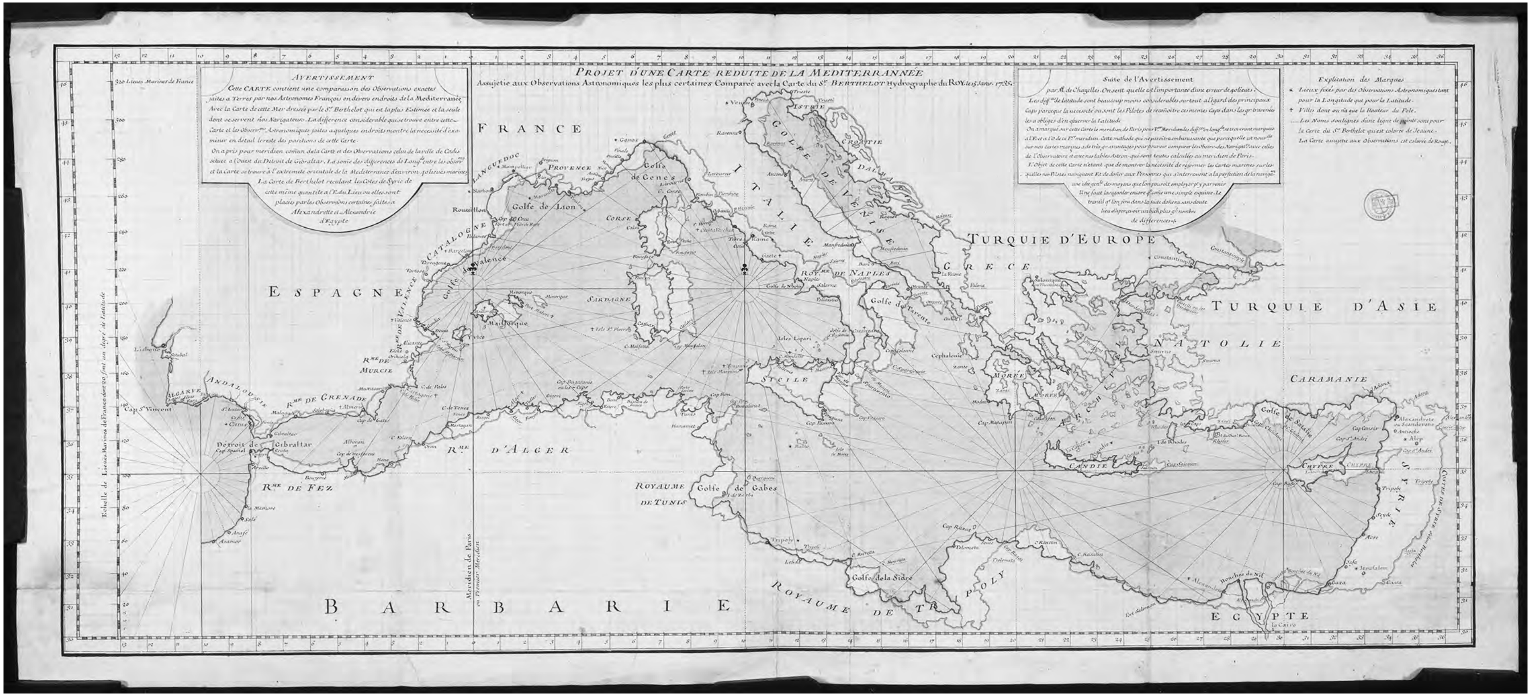

Figure 7.7.4 Philippe Buache and Dépôt des Cartes, Plans et Journaux de la Marine, "Projet d'une Carte réduite de la Méditerranée assujetie aux Observations Astronomiques les plus certains Comparée avec la carte du Sr. Berthelot hydrographe du Roy, le 15 Jan 1735." Source : Bibliothèque nationale de France, département des Cartes et Plans, SH portefeuille 64, pièce 12

which the longitude of sites around the world was calculated. The longitudes of sites established by astronomical surveys were literally plotted on the floor of the Royal Observatory on a huge terrestrial map (Brown 1941), an artifact signaling the increasing dominance of key political and intellectual centers that attended the emergence of the modern, centralized state. The 1735 composite map of the Mediterranean is itself fully integrated into this universalizing mathematic construct.

Given the means available, the notion that this map could have been the product of systematic surveys is unthinkable. The French were at the time leaders in such long-term enterprises but the production of a complete trigonometric survey of France had only barely begun (Konvitz 1987). The text accompanying the 1735 map indicates that French scientists had visited a small number of coastal sites in the Mediterranean to determine their longitude and latitude using modern astronomical techniques. The 1735 map is a compilation of data points amassed from an array of sources, including the testimony of ancient geographers whose work was still considered authoritative for regions that had not been surveyed since antiquity. Thus, both modern techniques and ancient knowledge were essential to the creation of the 1735 map, revealing that for a whole constellation of Enlightenment antiquaries, linguists, scientists, and administrators, the ancient Mediterranean world was integral to the shaping of the new.

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Part VIII

Southeast Asia

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8.1

Globalizing early Southeast Asia

Miriam T. Stark

Southeast Asia is a place of complex social and material connectivities and millennia-deep traditions of circulation: people, ideas, trade goods, and food. Despite the region's rich alluvial valleys and upland regions, it is profoundly maritime: the Indian Ocean bounds its western margin and the Pacific Ocean its eastern limits. Pulses of past globalization or macroscale flows of information (Feinman this volume) have characterized the region since the Middle Pleistocene, when *Homo erectus* populations began the process. Since that time, each migrating human group brought new ideas and technologies, and new ways of organizing society. Sea nomads, sailors, merchants, and pirates have traversed Southeast Asia's many seas for at least 3,500 years, generating discrete and overlapping international networks and establishing diasporic communities along the region's coasts. And by the late centuries BCE, Southeast Asians circulated in maritime networks that linked different language groups across seascapes, and from river mouths to their upland springs.

The term "globalization" is relatively rare in Southeast Asian scholarship, but scholars have grappled with inter-regional interaction vis-à-vis indigenous development since the 1930s. Georges Coedès (1948) first synthesized how these Southeast Asian societies confronted, accommodated, resisted and selectively adopted traits and traditions from the outsiders who landed on their shores after writing appeared in the region in the late centuries BCE. These processes become clearer with writing, and Southeast Asia's earliest accounts were recorded by emissaries for Chinese courts, whose rulers sought tropical natural resources: aromatic woods, exotic feathers, spices, and precious metals. That indigenous writing appeared a few centuries later in some of Southeast Asia's regions is suggested by third through sixth century CE Chinese dynastic annals (Pelliot 1903), although the region's tropical climate has destroyed texts made on organic materials.

Although Euroamerican-based historical archaeologists use the first European contact to mark the start of the historical period, Southeast Asian "history" began with the Han Chinese conquest of northern Vietnam in 111 BCE (Stark 2014). With Han China's institutionalization of "silk roads" that ferried Chinese manufactured goods westward along terrestrial and maritime routes, Southeast Asians added their goods to the mix. Many Southeast Asians subsequently adopted writing systems and state-level political organization, fueled by inter-regional exchange networks that brought exotic goods and exported local resources. Buddhism, Brahmanic cults, and Islam all swept through the region by the fourteenth century CE, before the first European with an eye toward control docked at a Southeast Asian port.

Archaeological perspectives on ancient Southeast Asian globalization

Southeast Asian archaeological research enriches and complicates our understandings of past globalizations. Archaeological studies challenge external Chinese views of these "southern barbarians" and offers microscalar insights on community organization and scale. Archaeological recovery of fifteenth-century pig remains from Bandanese sites (eastern Indonesia) suggests that Islamicization was less monolithic than ethnohistoric records report (Lape 2000). Southeast Asia's "prehistoric" archaeologists work without a net to examine the undocumented past before 2500 YBP, but the later period offers a working model for understanding intercultural interaction. Our archaeological obsession with the social life of things illuminates how their technology of manufacture reflects areas of influence in bronze "Dongson" drums (Calò 2014), in "Iron Age" Sa Huynh nephrite pendants called ling-lingo (Hung *et al.* 2013), and in glass and stone beads (Bellina 2014). What do we make of these objects that were manufactured in certain localities, and prestige goods in entirely other places? Regardless of terminology used, Southeast Asia's archaeological record offers a rich and only lightly explored source of comparative material on the rise, collapse, and regeneration of inter-regional interactional networks that circulated goods and people beyond the region's geographical limits.

Southeast Asian archaeologies of globalization

Chapters in this section examine processes associated with the development of dense interactional networks (following Knappett this volume) in Southeast Asia's past. They use archaeologically derived data on food and ceramic production, urbanization, and art styles. These pulses of globalization do not privilege one player over another. Interactions were instead bidirectional, and constituted part of broad geographic and social connectivities.

Dorian Fuller, Cristina Castillo, and Charlene Murphy address the nature, content, and cultural implications of "food globalization" across Monsoon Asia (i.e. Southeast Asia, southern China, peninsular India and Sri Lanka) that began *c.*6000 YBP, more than 5,000 years before the more famous Columbian exchange between the New and Old worlds. Agricultural knowledge and some cultigens linked populations across broad regions, like japonica rice, which was grown for more than two millennia before Southeast Asian populations embraced the currently dominant *indica* rice. These intercultural transfers were not without "friction": cultigens that traveled well, Fuller *et al.* argue, did so because their cultivation fit prior culinary preferences and local labor organization (Fuller and Lin 2009). Recent archaeological work in peninsular Thailand suggests short-term dietary integration of China-derived crops and India-derived pulse crops in the late centuries BCE, but only the long-term adoption of mung bean as part of the Southeast Asian cuisine.

Alison Carter and Nam Kim trace the production of global cultures in the Red River Delta (northern Vietnam) and the Mekong Delta (southern Cambodia and southern Vietnam) from 2500 to 1500 BP. Previous scholars have attributed early urbanization and state formation in each region to external influences: to Han Chinese domination (Red River Delta) and to South Asians (Mekong Delta). Carter and Kim instead emphasize the role of emergent elites in these processes. In both regions, local elites embraced and embellished components of developing trade networks to promote their ascendance to, and institutionalization of, power. Cultural homogenization and heterogenization, two globalization processes that Jennings (this volume) describes, occurred in both regions as elites and their followers participated in the growth of inequality that was intrinsic to state formation.

Tom Hoogervorst's chapter examines maritime Southeast Asia and its growing relationship to the Indian Ocean world during the same time period. By the mid-first millennium CE, Southeast Asia's coasts hosted complex polities whose political economies relied on international trade. Chiefdoms, kingdoms, and the Srivijaya Empire formed during this period; many would develop into sultanates by the mid-second millennium CE. Such integration was not monolithic: Southeast Asians produced ocean-going craft whose sailors circulated within the region's seas to trade, marry, and clash with coastal populations. Either they or their watercraft technology sailed beyond the region to the east into the Pacific. They also sailed westward into the Indian Ocean with their goods (as plants, raw materials, and finished products) as part of a growing Indian Ocean/Mediterranean world system.

What moved into Southeast Asia during this time were powerful Indic ideologies, particularly Buddhism and Brahmanism, whose spread is the subject of Stephen Murphy and Leedom Lefferts' chapter. The great Mauryan king Asoka sent Buddhist missionaries eastward in the fourth century BCE to atone for his dynasty's carnage-filled conquest of peninsular India, but material reflections of these ideologies fluoresced in mainland Southeast Asia several centuries later. Archaeological and art historic research on first-millennium states from Myanmar's Irawaddy banks to southern Vietnam (including the Funan example in Carter and Kim's chapter) has produced evidence for urban centers of Brahmanic and Buddhist temples that housed Indic statuary as houses of the gods (Stark 2006). With these urban forms and religious monumentality came South Asian-derived scripts, prescriptive texts (*sastras*) for religion and statecraft, and the rise of the region's first true kings. Some cultural traditions favored one Brahmanic deity over another; others forefronted Buddhism. The authors describe first-millennium CE sites to explore localization, indigenization, and globalization.

Lisa Niziolek and Amanda Respess' chapter uses Geoff Wade's (2009) model of a tenth- to fourteenth-century Early Age of Commerce to understand the thirteenth-century CE Java Sea shipwreck and twelfth-century CE Breaker Shoal shipwreck. The Java Sea's massive and well-preserved cargo (from China, Southeast Asia, and the Middle East) never reached its destination, and thus offers an unprecedented opportunity to understand dimensions of the Southeast Asian world on the threshold of the Early Modern period. Its contents reflect a complex series of trading relationships built on trading ports, artisans, and upland collectors and moved along well-established trade routes by sailors and merchant guilds. Early Modern Southeast Asian elites pursued an ever-changing series of political alliances with European emissaries from countries and companies who sought Southeast Asian footholds to gain access to China and its lucrative goods.

By the fifteenth century CE, Philippine chiefly elites used Chinese porcelain serving vessels in competitive feasting events. Malaysian and Indonesian economies were transitioning to low-value coinage, populations were converting to Islam, and overseas Chinese established ethnic enclaves in major population centers (Miksic 2010). A sixteenth-century surge in Chinese, Vietnamese, and Thai stoneware ceramic manufacture helped Philippines-based Muslim traders and Chinese traders build intra-regional trade networks with stratified polities whose elites sought prestige goods (see review in Li 2013: 45–50). Sixteenth-century Europeans thus entered a complex world of competing, multi-ethnic kingdoms and sultanates, thriving port cities, and well-established trade networks.

How can we trace some of these interactional networks within and beyond Southeast Asia? John Miksic and Goh Geok Yian use ceramic distributional patterns from the ninth through sixteenth centuries CE to understand the growth of fifteenth–seventeenth-century Southeast Asia into a global marketplace. Their general outlines of earthenware, stoneware, and porcelain ceramic distributions over this seven-century period identify fluctuations through time in the scale and scope of pan-Asian economic networks. Artisans worked with merchants, who moved wares by land or by ship to trading centers within and beyond Southeast Asia's seas. By the sixteenth century CE, at least three Southeast Asian cities housed populations of 50–100,000 inhabitants; four of the region's cities in the following century attained this size (Reid 1980: 237–38).

Closing thoughts

The fact that European contact did not trigger massive epidemics in Southeast Asia as it so tragically did across the New World (and into the Pacific) in the sixteenth through eighteenth centuries is testimony that Southeast Asians lived in a cosmopolitan world well before the "Age of Globalization." In Southeast Asia, what scholars working elsewhere call globalization involved the replacement of key actors in trade networks, the embrace of new technologies, and settlement shifts to maximize profits from international commerce. Archaeological research, some of which these chapters describe, offers new insights on past globalizations.

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8.2

How rice failed to unify Asia

Globalization and regionalism of early farming traditions in the Monsoon World

Dorian Q. Fuller, Cristina Cobo Castillo and Charlene Murphy

Processes of globalization were ultimately driven by migration, of farmers with their crops, or the adoption of new diversity through contact. However, despite such processes, agricultural systems and foodways remained diverse and often regionally distinctive. These distinctions are not easily explained either by ecological differences, or entirely by broad cultural traditions. Instead patterns of regionalism persisted despite globalization in part due to disjunctions of cultural traditions and ecological constraints and the complex mosaic of these boundaries.

Introduction

Much of the Old World already shared a great deal of its agricultural biodiversity long before Columbus reached the Caribbean or Vasco de Gama crossed the Indian Ocean. Instead, earlier globalization processes had already linked agricultural developments across wide regions. Sorghum was grown throughout much of Africa, the Indian subcontinent, parts of Southeast Asia, China and Mediterranean Europe; wheat could be found right across Eurasia and south of the Sahara in Ethiopia and Mali; Asian rice (*Oryza sativa*) was well established in Swahili east Africa, the Mediterranean through the Middle East, India, Southeast Asia, China, Korea and Japan. The intercontinental pattern of these crops for the Medieval World was mapped by Chaudhuri when he defined *Asia before Europe* (1991). This was not just true of such major staple crops, but also many more subsidiary species, from sesame to mungbean, from drumstick trees to coconuts. While in some cases this can be accounted for by widespread wild species, and sister species that were domesticated more than once in far-flung places, such as African and Asian rices (Callaway 2014), most domestications appear to have been quite rare and localized within the overall range of wild progenitor populations (see, e.g. Larson *et al.* 2014; Zohary *et al.* 2012 for some Near Eastern taxa; Fuller *et al.* 2010 for Asian rice). Thus in early periods, mostly "prehistoric" (depending on the part of the world's chronology one prefers), many crops had spread more widely and become globalized. Recently historians and archaeologists have called increasing attention to the antiquity of "food globalization" (Boivin *et al.* 2012; 2014; Fuller *et al.* 2011b; Jones *et al.* 2011; Van der Veen 2011).

These processes of globalization were ultimately driven by migration, of farmers with their crops, or the adoption of new diversity through contact. Such adoptions are part and parcel of increasing connectivities, and arguably at the leading edge of the complex connectivities theorized as representing ancient globalizations (as defined by Robertson this volume; Knappett this volume). However, despite such processes, agricultural systems and foodways remain diverse and often regionally distinctive. These distinctions are not easily explained either by ecological differences, although these clearly play an important constraining role in crop distribution, nor entirely by broad cultural traditions (judged for example by language family affiliation of ethnolinguistic groups). Instead, patterns of regionalism persisted despite globalization in part due to disjunctions of cultural traditions and ecological constraints and the complex mosaic of these boundaries, but also connected to traditions of "taste" and regional identity. Feinman (this volume) advocates "a multiscalar and deep time perspective on the long history of human connections," and food crops, we will argue, provide an essential window on connections. Food is both intimate – consumed and prepared at the household level – and regional, transforming landscapes for agricultural production to feed the needs and desires of communities. Indeed, we would contend that food crops, their adoption and spread, may often be among the first evidence for emergence of the connectivities and networks that come to represent globalization (as is the case for the earliest maritime links between Africa and India: see Fuller and Boivin 2009). Food, after all, is often shared in situations of hospitality, even when languages are not shared. At the same time, to know that a foreign plant is edible and cultivatable requires some transmission of knowledge that can only come through human connections.

The present chapter explores these patterns across Monsoon Asia, of both selective crop dispersals geographically and of inter-regional differences in agricultural and food practices, including South Asia, Southeast Asia and China. We will explore earlier globalization processes, which interconnected different agricultural worlds. As emphasized by Knappett (this volume) globalization implies increasing connectivity over both space and through time that resulted in significant social change. We will argue that the adoption of food crops certainly has links to major social changes and marked periods of increasing connectivities between different cultural areas, but without leading to cultural same-ness. We also demonstrate how globalization in Asia is more akin to Wolters' (1999) concept of localization or "global localization," defined as "how the homogenising elements of global culture (from institutions and commodities to social practices and ideas) are differentially incorporated into local cultures, which are in turn altered in the process" (Pitts and Versluys 2015: 14).

Initial crop domestications in Monsoon Asia

The origin of agriculture was transformative. This led species to new engagements with other species that changed them (domestication), that transformed landscapes to produce a few key species (environmental anthropogenesis), and that led to a major demographic transition in human populations and those of favored species, domesticates and commensals. In Southeast Asia, the adoption of cereal cultivation, especially rice, and the management of pigs and cattle is considered the primary force behind social change during the prehistoric period, which formed "distinctive regional groups of people in a period of rapid population growth" (Gignoux *et al.* 2011; Higham 2014). In China and India agricultural production supported dense populations and the development of urbanism, from about 4,000 years ago in central China (Liu and Chen 2012) and 2,500 years ago in the Ganges valley (Allchin 1995).

In Monsoon Asia, east of the Indus, through South Asia, mainland Southeast Asia and in China east of the Tibetan Plateau, a mosaic of several different pathways to agriculture was followed based on summer rainfall (monsoons) and cultivation of a diversity of small-grain grasses (poorly represented by the English term "millets"), or rice (Figure 8.2.1). Northern Chinese millet domestication probably preceded rice domestication (Zhao 2011). It is believed that domestication took place in the Loess Plateau region of northern China where the wild progenitor green foxtail (*Setaria italica* ssp. *viridis*) is found. The wild populations of broom-corn millet (*Panicum miliaceum*) are poorly characterized but presumably occurred in the Inner Mongolia steppic region. One or both of these millets are found in widely dispersed cultures across northern China, from Gansu in the west through Shandong in the east and northwards to eastern Inner Mongolia, all at *c.*6000 BCE (Bettinger *et al.* 2010; Liu *et al.* 2009; Zhao 2011). Even earlier exploitation, dating back to 8000–9000 BCE, is suggested by phytoliths and starch grains (Yang *et al.* 2012), although the extent of cultivation or domestication remains unclear.

Interestingly, other domesticates of north or central China are only added over the course of the middle Neolithic (4500–2500 BCE), including pigs, soybeans and hemp. The earliest use of soybeans (*Glycine max*) is to be found in central China, south of the Yellow River, with finds

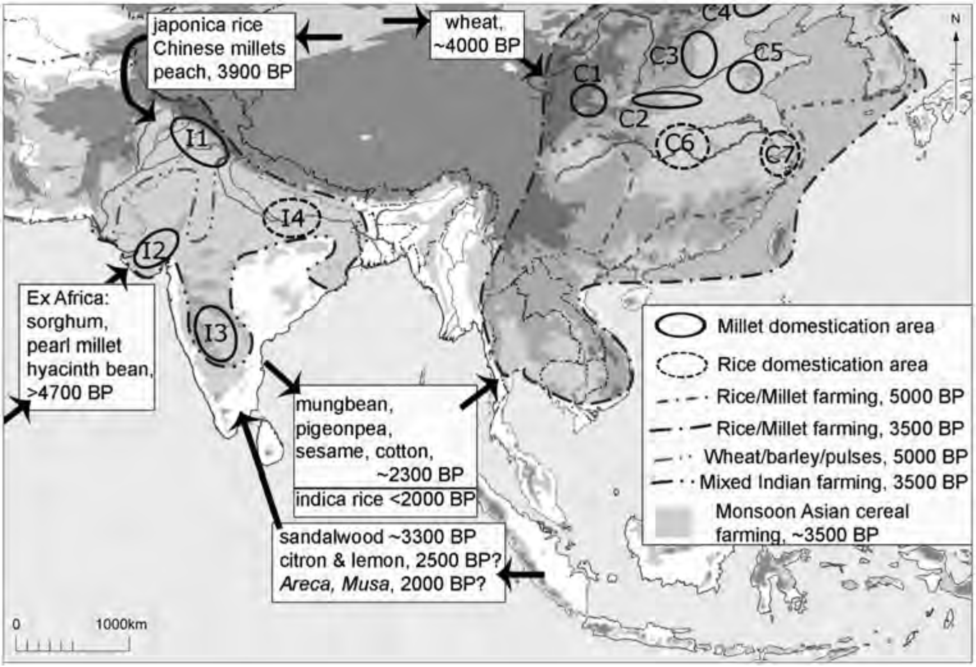

Figure 8.2.1 Map summarizing the centers of cereal domestication and early cultivation in Monsoon Asia. Isochrons for the dispersal of farming based on Chinese millets/rice and on wheat/barley or mixed Indian systems (including wheat/barley and local millets or rice) indicated. Selected later crop translocations between regions are indicates in boxes. Areas of plausible domestication indicated as follows: I1. Upper Indus tributaries and Himalayan flanks (millets and pulses); I2. Suarashtra/Thar fringe (millets and pulses); I3. South Deccan (millets and pulses); I4. Middle Ganges (proto-*indica* rice); C1. Dadiwan culture (broomcorn millet); C2. Peiligang culture (foxtail millet, pig(?)); C3. Cishan culture (broomcorn/foxtail millet); C4. Xinglongwa culture (broomcorn/foxtail millet); C5. Houli culture (broomcorn/foxtail millet); C6. Middle Yangtze & tributaries (*japonica* rice); C7. Lower Yangtze (*japonica* rice)

from Jiahu, dating to the later seventh millennium BCE (Zhao 2010). Seed size change suggests that soybean domestication is evident between 3650 and 1450 BCE (Fuller *et al.* 2014; Lee *et al.* 2011), although a separate domestication in Jomon Japan seems clear (Lee *et al.* 2011). Hemp (*Cannabis sativa*) was traditionally an oilseed as well as a fibre crop in early China. It was well established as an edible seed crop and drug by the time of early Chinese written sources (Li 1974a, 1974b), but well identified archaeological finds are few, and date from the later Yangshao through the Bronze Age (Zhao 2011).

Pig is the only early indigenous animal domesticate of central China; although dog would have been around much longer, since their domestication(s) in western Eurasia happened in the Upper Palaeolithic (Larson and Fuller 2014; Skoglund *et al.* 2015). Recent assessments suggest that the pig may have been domesticated already alongside pre-domestication cultivation of rice at Jiahu before 6000 BCE (Cucchi *et al.* 2011), and might have been present in at least small quantities at Kuahuqiao in the Lower Yangtze by 5500 BCE (Yuan *et al.* 2008). Genetic data suggest a single major domestication of pig in central China, but distinct lineages were brought into domestication in mainland Southeast Asia (or southwest China), on the Indian subcontinent, and, plausibly, separately on Taiwan (Larson *et al.* 2010; Groenen *et al.* 2012), although zooarchaeological evidence for placing these in cultural space or time remains lacking.

While a classic set of farmyard animals was domesticated in western Asia (sheep, goat, cattle) which dispersed eastwards into this zone, especially in China and India, various alternative livestock species became important across Monsoon Asia, including water buffalo (*Bubalus bubalis*) domesticated in the Indus region (the river type) and probably somewhere in northern Southeast Asia (the swamp type) (Larson and Fuller 2014). Humped zebu cattle (*Bos indicus*) hail from the Indus region, either from a distinct domestication, as suggested by the bone assemblages of Mehrgarh (Meadow 1993) or by early hybridization of introduced domesticated cattle with local wild populations (Larson and Burger 2013). Within zebu there are two major genetic groupings, suggesting that further introgression of local wild populations was important as zebu spread east from the Indus into inner India (Chen *et al.* 2010). In Southeast Asia, banteng cattle in Assam (*Bos frontalis*) and Bali cattle (*Bos javanicus*) in Indonesia remain enigmatic in terms of when and where they were domesticated, as does the role of introduced zebu cattle in promoting these processes (Larson and Fuller 2014). It is likely that by the first millennium CE all of these bovines were under domestication, but the earlier processes of their taming and anthropogenic dispersal, especially in Southeast Asia and southern China, are poorly documented.

Systematically collected archaeobotanical samples in the past few years have begun to make possible the documentation of rice domestication in terms of the evolution of morphological domestication traits, the development of arable habitats, and the shift in reliance from wild gathered foods to cultivated rice (Fuller and Qin 2009; Fuller *et al.* 2010, 2011a, 2014). Recent work documenting preserved rice spikelet bases characterizes the dominance of non-shattering panicles reliant on human harvesters for seed dispersal over a period of *c.*3,000 years, comparable to well-documented cereal domestications elsewhere, such as the Near East (Fuller *et al.* 2014).

The genetic evidence of rice points to two centers of early cultivation, with subsequent prehistoric hybridization between the two. China's Yangtze basin was the hearth for *japonica* rice and South Asian wild populations were ancestral *indica* (Fuller *et al.* 2010). Data indicate that domestication of *japonica* rice in China took place by 4500–4000 BCE in the Lower Yangtze valley, while a separate domestication in the middle Yangtze region may have been earlier, even before 6000 BCE (Fuller and Qin 2009; Zhang and Hung 2013; Deng *et al.* 2015). These were protracted evolutionary processes, taking millennia (Fuller *et al.* 2014), and it is easier to document the final stages as plant morphology was changed across the population, rather than the leading edge when human behaviors started to shift to cultivation. Sites dating to as early as 10,000–7000 BCE (e.g. Shangshan, Pengtoushan) show evidence of rice use, and might lie early in the cultivation trajectory (e.g. Wu *et al.* 2014) but better archaeobotanical data are needed to prove this.

On the other hand, domesticated *indica* only appears around 2000 BCE in South Asia, with the earliest unambiguous evidence of non-shattering spikelet bases from 1800 to 1600 BCE (Fuller 2011). In India, one finds early evidence of rice use in the middle Ganges at Lahuradewa with a direct date of *c.*6400 cal. BCE. However, this is most logically early management, or non-domestication cultivation, since the genetics of domestication traits appear to have been hybridized into *indica* rice from early East Asian *japonica* (Fuller *et al.* 2010; Fuller 2011; Gross and Zhao 2014). Rather than a direct dispersal of rice from the Yangtze to the Ganges, archaeological data point to early trade via intermediaries in central Asia that transferred western crops to China (such as wheat) and various Chinese crops, including *japonica* rice, into Pakistan and north-west India during the Late Harappan era after 2000 BCE (Fuller and Qin 2009; Fuller and Boivin 2009; Boivin *et al.* 2012).

Just as Indian rice is younger than Chinese rice, but evolves by a distinct process, several millets in India are indigenous domestications that were later than Chinese millets. Several distinct regions in India appear to have domesticated millets in the fourth or third millennium BCE (Fuller 2014; Fuller and Murphy 2014). In the southern peninsula cultivation of browntop millet (*Brachiaria ramosa*), accompanied by bristly foxtail (*Setaria verticillata*), and the pulses mungbean (*Vigna radiata*) and horsegram (*Macrotyloma uniflorum*), supported the development of agricultural villages in the Ashmound cultural tradition that flourished from 3000 to 1200 BCE, with increasing sedentism and population despite drying climatic conditions (Boivin *et al.* 2008; Ponton *et al.* 2012). On the Saurashtra peninsula in western India, little millet (*Panicum sumatrense*) was the staple grain, accompanied by several *Setaria* spp. and/or *Brachiaria*, and the urd bean (*Vigna mungo*). While these probably supported villages of the Padri-Anarta tradition from *c.*3500 BCE, they are clearly in evidence from later Harappan-influenced sites after 2600 BCE (Weber 1991; Fuller 2011). It may be in this broader region where sesame (*Sesamum indicum*) was first cultivated, which spread as a crop throughout the Indus region and then onto Mesopotamia, as well as eggplant (*Solanum melongena*) (Kashyap 2006) – eggplants in Southeast Asia are inferred to be a separate domestication (Meyer *et al.* 2014). The subsistence economies here were ultimately based on adaptations to the tropical savannahs, with importance for both pastoralism and drought-tolerant monsoon season cultivation.

Another likely region of millet domestication was in north-west India near the upper Punjab plains of the Ganges, Yamuna and Ravi rivers, where an unrecognized Neolithic is postulated to precede the Early Harappan sites (from *c.*3200 BCE), with evidence for little millet, horsegram, mungbean, and probably domesticated sawa millet (*Echinochloa colonum*), prior to evidence of contact with other Indian millet centers and alongside introduced western crops like wheat, barley, and lentil (Weber and Kashyap 2013; Fuller 2014; Fuller and Murphy 2014). While perhaps three distinct regions transitioned independently to millet cultivation in South Asia, these areas ultimately shared the same diverse range of crop species both native to the subcontinent and introduced from outside, including millets and *japonica* rice from China.

Farmer dispersals and early crop diffusion: China to Southeast Asia

The oldest domesticated cereals in the archaeological record of Southeast Asia came from China: rice (*Oryza sativa*) and foxtail millet (*Setaria italica*). On current evidence foxtail millet could be older, as it is documented from Non Pa Wai, Thailand with a direct date of 2470–2200 cal. BCE (Weber *et al.* 2010), predating the earliest rice from the same valley (i.e. Khao Wong Prachan Valley) by at least a thousand years. Elsewhere in Southeast Asia, earlier reports of rice grains or phytoliths could derive from wild populations (Yen 1982; Fuller *et al.* 2010). This, indeed, highlights one of the challenges in Southeast Asian archaeobotany: wild rices are extensively distributed throughout the region, so systematic collection of morphological indicators of domestication, such as spikelet bases, is necessary.

The spread of rice farmers from China into mainland Southeast Asia probably took several routes; from the middle Yangtze via Guangdong (Fuller *et al.* 2010); via Yunnan (Higham 2005; also Higham *et al.* 2011) and via both Yunnan and Guangxi (Higham 2013) along the coasts, lower mountain slope zones and down major rivers. For insular Southeast Asia, the Austronesian dispersal route proposed by Bellwood (2007) from Taiwan into the Philippines currently does not have enough rice evidence to support it; nor is there evidence for millets south of Taiwan. Early pigs in Taiwan and the Philippines are plausibly the Lanyu genetic lineage of pigs of local derivation, rather than either the "Pacific Clade" or Chinese mainland pigs (see Larson *et al.* 2010; Larson 2012).

We also find different systems of cultivation throughout the prehistoric sites studied. The evidence so far available suggests that wetland systems of agriculture were used in the lower and middle Yangtze *c.*4000 BCE from where they spread (Fuller and Qin 2009; Nasu *et al.* 2011; Weisskopf *et al.* 2014, 2015). However, wetland cultivation was probably not adopted in Southeast Asia when rice was first introduced. Instead early rice cultivation systems in the interior of mainland Southeast Asia were dryland (rainfed), whilst those in lower or coastal areas could have been décrue cultivation, on seasonally flooded land. Dryland systems of rice cultivation are indicated by the study of weed flora associated with rice cultivation spanning the Bronze to Iron Age (Castillo 2011; Castillo 2013; Fuller *et al.* 2011a). This is supported by some local geoarchaeological studies (Allen 1991, 2009).

The appearance of domesticated pig in Southeast Asia (SEA) coincides with the period when domesticated cereals are introduced, although disentangling introduced Chinese pigs from genetically distinct indigenous mainland Southeast Asian pigs remains a challenge. Local pig domestication processes remain undocumented, but are implied by modern pig genetics (Larson *et al.* 2010). Whilst there is not enough evidence to suggest that early farmers from Taiwan took rice to the Philippines during the Neolithic, the evidence for pigs at the site of Nagsabaran shows a plausible introduction *c.*2500–2000 cal. BCE from Taiwan (Amano *et al.* 2013; Piper *et al.* 2009), but these are likely to be an endemic Taiwanese ("Lanyu") pig rather than Chinese Neolithic pigs (see Larson 2012). More evidence for the introduction of domesticated pig southwards is found in the Uattamdi sites, Kayoa Island, Indonesia dating to 3300 BP (Bellwood 1998), although modern genetic geography might suggest that these pigs came from the mainland and not from Taiwan or the Philippines, since Indonesian, New Guinean and Pacific pigs originate from the mainland Southeast Asian boar not Chinese boar (Larson *et al.* 2010). In mainland SEA, domesticated pig is found at Man Bac in northern Vietnam dating to *c.*1800–1500 BCE (Piper *et al.* 2014; Sawada *et al.* 2011). Domesticated or managed pig is difficult to differentiate from the wild stock and most studies use morphometric analyses and age profiling of pigs to reflect human management (Piper and Amano 2013; Larson *et al.* 2010). Using these methods, pig remains in southern Vietnamese sites An Son (1800–1600 BCE) and Rach Nui (1500–1200 BCE) are said to represent managed/domesticated pig (Oxenham *et al.* 2015; Piper *et al.* 2014; Piper and Amano 2013). Ban Non Wat also reports domesticated pig from the Neolithic Period *c.*1650–1050 BCE (Higham and Higham 2009; Higham and Rispoli 2014). Although the Chinese origins for domesticated pig have been established, genetic evidence shows that local Southeast Asian wild boars introgressed with Chinese domesticated pigs and therefore took part in the domestication process of pigs in Southeast Asia (Larson *et al.* 2010).

The situation for bovine livestock in Southeast Asia is more complicated than for pig. Although cattle remains are reported in Southeast Asian sites, their status as hunted or domesticated stock remains unclear (Amano *et al.* 2013; Fuller *et al.* 2011a). The *Bos* faunal remains at Non Nok Tha *c.*2000 BCE were demonstrably smaller than wild cattle, prompting Higham and Leach (1971) to propose a center for domestication in north-eastern Thailand. At Ban Non Wat, both domesticated and local wild cattle (*Bos gaurus, B. javanicus* or *Novibos sauveli*) were identified (Kijngam 2010; Piper *et al.* 2014). On the other hand, water buffalo (*Bubalus bubalis*) at Ban Non Wat were wild. An early introduction of water buffalo in northern Philippines dates to 500 BCE (Amano *et al.* 2013). The earliest reported bovine find (possibly of tamaraw [*Bubalus mindorensis*]) in Southeast Asia is from Callao Cave, Philippines, dated to *c.*65,000 BCE via U-series ablation of associated bones (Amano *et al.* 2013; Mijares *et al.* 2010).

Farmer dispersals and early crop diffusion: India

South Asia was characterized by a mosaic of local domestications and the diffusion of domesticated species through interaction between regions. At least three or four regions had transitions from hunting and gathering to independent cultivation of locally available species (see above). Most of India was transformed to landscapes of agriculture by diffusion, probably including both the migration of farmers to earlier established cultivation centers on the subcontinent and by the transfer of crops and livestock between cultural traditions. This lead to an increasing diversity of crops in India—indeed there is a much greater diversity of grain crops documented in prehistoric India than in any other world region. This diverse range of crops came to be increasingly shared across different regions of India.

In western India, in Gujarat and parts of Rajasthan, evidence for local plant domestication is entwined with the introduction of livestock (sheep, goat, and zebu cattle) from the Indus valley, west of the desert from the middle of the fourth millennium BCE, leading to established agro-pastoral village cultures, such as the Ahar tradition in Rajasthan or the Sorath Harappan of Saurasthra by 2500 BCE. While the Gujarat region was incorporated in the expanding influence of the Indus Valley civilization from about 2500 BCE, evidence for a local transition to food production dates to about a millennium earlier (Ajithprasad 2004). It is likely that this part of India was the first in Asia to bring into local cultivation African crops such as pearl millet and sorghum adopted by 2000–1700 BCE, with debated evidence for finger millet (Fuller and Boivin 2009). The first rice to be grown in this region is of similar age (Fuller *et al.* 2010), although whether it was early *indica* forms introduced from the Ganges or *japonica*, introduced down the Indus from a north-western entry to the subcontinent is unclear.

The centre of the Southern Indian peninsula is a savannah habitat corridor. Through this region the same livestock species (sheep, goat, cattle) dispersed by *c.*3000 BC, but were combined with millet and pulse crops domesticated from local flora, by at least 2000 BCE, and plausibly earlier (Fuller 2011). The appearance of wheat and barley by 1900 BCE, and later still after 1500 BCE some crops of African origin, indicates translocations of crops over the course of the Neolithic. Chinese millets, *Panicum miliaceum* and *Setaria italica* also probably spread through India over the course of the second millennium BCE, although their presence is problematic due to difficulties with reliably identifying these from some of the indigenous millets (Fuller and Boivin 2009). The presence of cotton (*Gossypium*) in some southern Neolithic sites, directly dated at Hallur to 900 BCE suggests local traditions of textile production (Boivin *et al.* 2008, 189). While a non-subsistence crop like cotton suggests production of commodities for trade, the techniques of spinning and weaving, as well as cotton and flax, likely diffused from the Indus region starting from the middle of the second millennium BCE (Fuller 2008).

This same period, in the second half of the second millennium BCE, also saw the first clear evidence for the cultivation of tree crops, like mango, jackfruit or *Citrus* – not just in South

India, but on the plains of the Ganges (Kingwell-Banham and Fuller 2012) – highlighting long-distance connections in the diffusion and development of orchard arboriculture. The Iron Age in the first millennium BCE then saw the widespread adoption of additional staple crops, notably rice, but also another Indian millet, kodo millet (*Paspalum scrobiculatum*). The earliest rice on peninsular India consists of just a few grains in the latest levels of the site of Inamgaon (Vishnu-Mittre 1976) at *c.*1000 BCE, but later sites see the widespread adoption of rice (e.g. Kajale 1989; Fuller *et al.* 2010). Kodo millet may have begun as a weed of rice, known from the Ganges plains, but in Iron Age and peninsular Early Historic sites it is often the predominant staple grain, perhaps due to its suitability for drier and marginal soils (e.g. Kajale 1984; Fuller 2014a). Thus, taken together we have at least four waves of diffusion of domesticates into South India, livestock at *c.*3000 BCE, winter cereals after 2000 BCE, commodity crops, textile techniques, fruit trees, and some African domesticates from 1500 BCE, and finally rice and kodo millet in the first millennium BCE. These new crops from the Gangetic north were accompanied by new high-status serving traditions, notably the *thali* plate, widespread and characteristically Indian today but initially associated with the spread of products (like Northern Black Polish Ware) and influence from northern India (Allchin 1959; Fuller 2005).

The Ganges plains of northern India have already been discussed as a plausible center for an independent start of rice cultivation, even if full morphological domestication has to wait until hybridization was possible with introduced rices from China (Fuller *et al.* 2010; Fuller 2011). By 2000 BCE sedentary villages, preserved as mounds, were widespread indicating an agricultural base with new introductions, such as western crops like wheat, barley and lentil, and livestock (sheep, goat, and zebu cattle), as well as some pulses from peninsular India, especially *Vigna* spp., like mungbean. Most of these introduced crops and animals spread from the west, under the influence of the Indus civilization, and were accompanied by adopted ceramic types that relate to serving traditions, such as dish-on-stand pedestalled plates in the Ganges (Tewari *et al.* 2008) and necked jars in southern India (Fuller 2005). In southern India, crops and vessels from the north-west have been hypothesized to relate in the first instance to liquid consumption, such as beers (Fuller 2005). The ceramic connection between the Ganges and the Indus, by contrast, points to the serving of products like loaves or cakes. This highlights the fact that despite growing similarities in terms of the range of crop plants available and the evidence for inter-regional trade and cultural flows within South Asia, some cultural differences were localized, maintained, or even intensified.

Increased crop diversity across the Indian subcontinent in the second and first millennia BCE led to shared trends towards population growth, state formation and urbanization. This brought with it trade and an increased sharing of cultural traditions, including what historians of India referred to as "Aryanization" of southern India, mainly in the first millennium CE (e.g. Stein 1998: 100), but beginning with the spread of Buddhism and the expansion of the Mauryan empire in the final centuries BCE. Despite this, food traditions remained distinctively different in north and south India.

The frontier of sticky cereals and milk

While differences in cooking tradition may have separated north and south India, even more pronounced are the long-term divisions in cooking and taste between the Indian subcontinent and eastern Asia. This was explored recently in terms of a long-lasting difference between a boiling and steaming cultural niche in eastern Asia and a bread and roasting niche in western Asia, with India tending to have more in common with western Asia (Fuller and Rowlands 2009, 2011). The archaeology of western Asia at least as far east as the Indus valley indicates

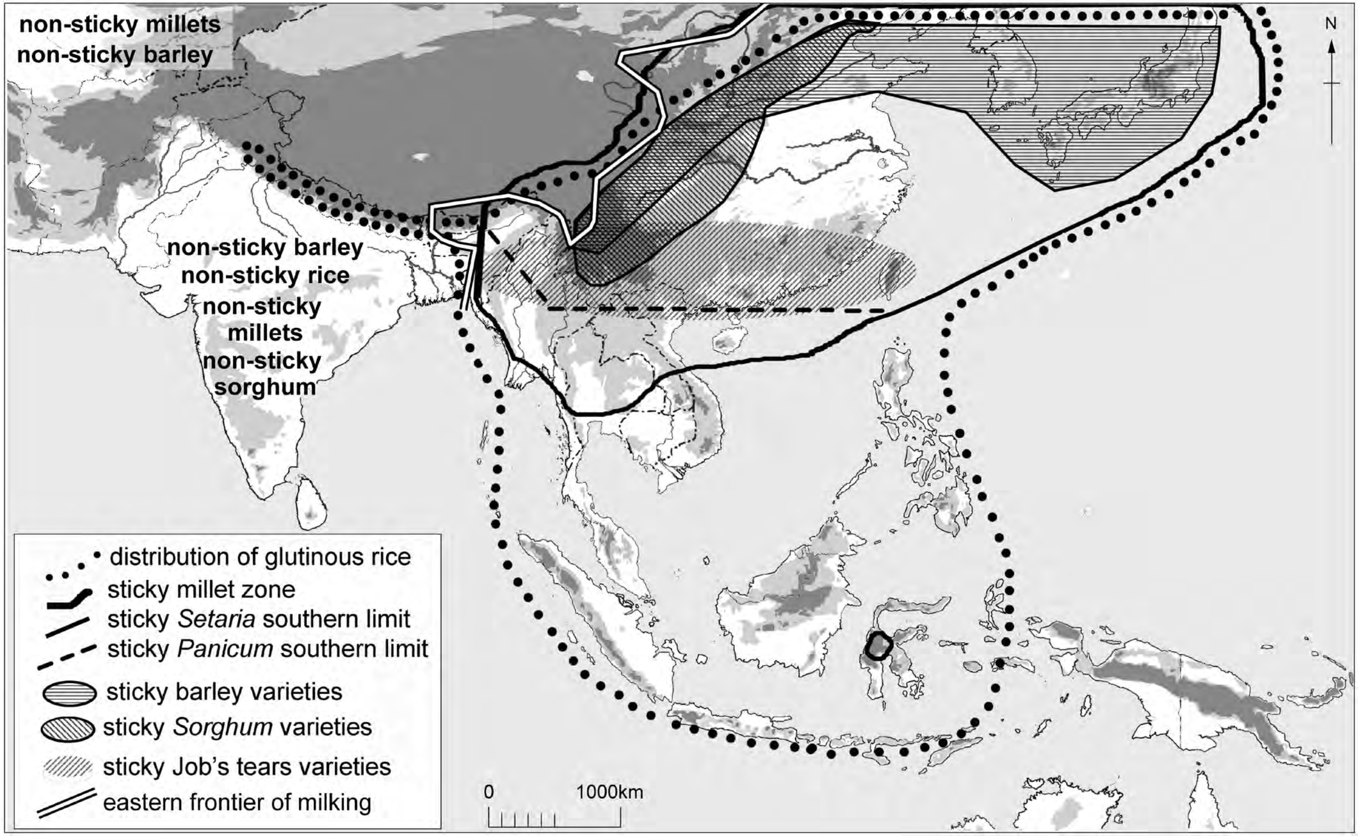

Figure 8.2.2 Map summarizing the geographical distribution of sticky (low amylose) and non-sticky forms of cereals in Asia in comparison to the frontier between western milk use and eastern non-milk use (after Simoons 1970). The limits of sticky cereals are approximate and have yet to accurately mapped (revised from Sakamoto 1996; Fuller and Castillo 2016)

that the presence of clay ovens (*tandur*) was typical in settlements before the development of ceramics. Together with the prominence of querns, this suggests that the baking (e.g. bread) and the dry cooking (roasting) of meat were likely widespread in the Neolithic if not earlier. By contrast in early China, even before clear evidence for domesticated crops, ceramic assemblages for boiling (of grains, nuts, tubers, fish) were widespread. Accompanying the rise of agriculture was the development of compound steaming vessels. This suggests that rice and millets were adopted into a cultural system of cooking and taste, and became increasingly adapted to better fit this system.

Despite sharing the same crops, between China or Southeast Asia and India, such as rice, foxtail millet, broomcorn millet, and sorghum, the varieties that are sticky, or technically have waxy starch, rarely cross this South Asia–Southeast/East Asia divide. Instead only non-sticky forms are widespread outside Southeast/East Asia. This division in terms of the texture of the cooked cereal has little adaptive meaning in terms of ecology of the cultivated environment, but instead represents adaptations to human taste preferences. As a current map of the distribution of sticky cereals reveals, these are diverse in Eastern Asia and rare west of Assam, except for some more westerly occurrences of sticky rice in the Himalayas, which we suggest correlated with Tibeto-Burman speakers, who originated further east, or their influence (Figure 8.2.2).

We suggest that the origins of this difference started with cooking traditions that necessarily made foods that were different in character. With food boiled or steamed in China, where ceramics developed already in the Pleistocene, consumed foods were sticky and more cohesive in texture compared to most those of South Asia—from the Indus to South India, where grinding stones and grain cultivation likely preceded ceramics, which came to be made from *c.*6000 BCE in the Indus and 3500–3000 BCE in most other parts of India. Here, flours could be baked, griddle cooked, or stone boiled but resulting in drier, doughier products. The Ganges valley is a potential exception where ceramics develop early (by 7000 BCE), perhaps also associated with the boiling of wild rice, fish, and other aquatic resources, but not elaborated to the extent of early to middle Holocene China. The differences in textures created by cooking traditions, such as the stickier, more cohesive cereal products from boiling or steaming in China created a taste preference that snowballed through subsequent genetic changes in the crops. This would have been further reinforced by rituals and belief systems about the relationships between kin lineages, transmitted bodily substances, and ritual interactions with ancestors (Fuller and Rowlands 2009, 2011).

The stickiness of rice or millet is partly due to cooking but mostly due to the structure of the starch in the grain, which in turn comes from a genetic change. Wild rices and non-sticky rices have 75–80 percent of the waxy starch, amylopectin. As amylose levels decrease and amylopectin increases, rice becomes stickier (Chang 2000). True glutinous rice has no amylose at all. Changes in starch composition are caused by post-domestication mutations, initially in temperate japonica rice, which in turn spread by hybridization into many rice varieties (Mikami *et al.* 2008). The occurrence of parallel mutations in many other cereals, especially the Chinese millets and East Asian varieties of sorghum, barley, jobs-tears and even Chinese, Korean and Japanese maize, only introduced from America in the past 500 years (e.g. Erikson 1969; Sakamoto 1996; Ma *et al.* 2010; Araki *et al.* 2012), points to an epicentre for selection of this trait in northern China. Also, sticky rice and millets are sweeter when boiled in water and have often been favored as the base for alcohol production, as in the rice and millet "wines" of China and its neighboring countries, with sticky millets known to be used from the earliest Chinese writings on wine production (Bray 1984). Although hard evidence is lacking, one can infer from geographical patterns in modern genetics and later historical documents that it was millets, and probably *Panicum*, that first evolved to be sticky, somewhere in northern China (Fuller and

Castillo 2016). In this case evolution of rice toward increasing stickiness took place after rice had spread northwards and after the first wave of rice, which was non-sticky, had spread to Southeast Asia. The spread of sticky rice in Southeast Asia, probably took place in the first millennium BCE. The valuing of sticky rice, from China through Southeast Asia, starting 2,000 or more years ago, can be conceived as a case standardization (in the sense outlined by Jennings this volume).

Sticky forms have failed to spread westward, even though non-sticky forms of these species have spread. The case of Chinese millets, *Panicum miliaceum* and *Setaria italica* is particularly clear, since it seems likely that sticky forms had evolved before these species diffused westwards from China (starting *c.*2500 BCE), but the sticky forms did not spread to central Asia, Europe or India despite their availability in the east. In addition, cereals originating elsewhere which have spread into East Asia have had sticky varieties evolve and persist there, including taxa such as sorghum and barley, which do not have waxy forms in their region of origin nor in India. Even more recently maize, introduced to China in the sixteenth century CE (Ho 1955), has evolved sticky forms (*Zea mays* var. *ceratina*) via waxy starch mutations at least twice within China to better fit regional tastes (Zhen *et al.* 2013). Thus, as cereals dispersed out of China, there was a selection against stickiness, while dispersal into China favoured stickiness.

Another key culinary frontier that divides South Asia from East Asia is the non-milking frontier (Figure 8.2.2), first defined by Simoons (1970, 1978). The use of dairy products is widespread in Europe, western Asia and South Asia, but has had minimal importance or even avoidance in central China and Southeast Asia. This is partly correlated with lactose tolerance genes in human populations, since many lactose-intolerant populations in India process milk by fermentation into curds. To the north and west of central China, Mongolian and Tibetan pastoralists also make important economic use of milk. What remains unresolved is the extent to which the non-milking frontier, which can be traced through the Assam region of north-east India, correlated with the division between use of sticky and non-sticky rice and cereals—do these in fact reflect the same deep time culinary and cultural frontier as hypothesized by Fuller and Rowlands (2009, 2011)?

The selectiveness of secondary exchanges between India and Southeast Asia

While the origins and dispersal of agriculture in Eastern and Southern Asia show many parallels, including sharing closely related crops and ecologies, subsequent transfer of crops between these regions was protracted and selective. Traditional food systems in Southeast Asia include cultivation of *indica* rice, the keeping of zebu cattle and beans such as mungbean and hyacinth bean that had come from India to Southeast Asia. These same taxa are also important in Chinese agriculture, although at present details of the timing and process by which crops were transferred from India is better documented from mainland Southeast Asia.

The beginnings of economic and cultural integration in Southeast Asia started in the fourth and third centuries BCE, and it was in this period when we have the first unambiguous evidence for regional trade networks that linked westwards also to India (Bellina *et al.* 2014). This period also known as "Indianization" is a term that signals the presence of macro-scale networks and the emergence of distinctive new social forms in Southeast Asia, and it implies a directionality of cultural flows in the network (see chapter by Knappett, this volume, on "-ization"). Sites dating from *c.*400 BCE to 200 CE, such as Ban Don Ta Phet in central Thailand, Phu Khao Thong and Khao Sam Kaeo in peninsular Thailand, and the Sa Hyunh sites in central Vietnam provide evidence for early interactions with India, China, and other Southeast Asian groups (Chaisuwan 2011; Dzung 2011; Glover and Bellina 2011). These links with India, China, and other Southeast Asian groups are well documented at Khao Sam Kaeo as illustrated by the material culture found at the site, such as rouletted ware from India, Han ceramics from China, and Dong Son drums from north Vietnam.

Extensive archaeobotanical research at the port-city Khao Sam Kaeo and at the entrepôt Phu Khao Thong has revealed that the settlers and traders at these sites relied on the China-originating *japonica* rice established since the Neolithic, and a suite of Indian pulse crops that arrived in Thailand at this time (Castillo 2013; Castillo *et al.* in press), including mung bean (*Vigna radiata*), horsegram (*Macrotyoloma uniflorum*), pigeon pea (*Cajanus* sp), and urd bean (*V. mungo*). Thus the food package at these sites suggests what is referred to as "deterritorialization" (see Jennings this volume), where the diverse range of *dhals* to accompany rice was more akin to cooking in contemporaneous India than it was to elsewhere or later in Southeast Asia. It appears that from the "South Asian pulse package," only the mungbean was adopted for the long-term, whereas other pulses, such as horsegram were not (Castillo 2013; Castillo *et al.* in press). This process is more representative of "localization" (Wolters 1999) or "global localization (glocalization)" (Pitts and Versluys 2015). Although "localization" was originally used to understand the appropriation of foreign beliefs into local culture providing locals with agency (Wolters 1999), we can find examples of food localization in this region such as with the mungbean and rice. The adoption of the mungbean into Southeast Asian cuisine was probably not as a dhal but the more localized use as a vegetable, as sprouts (Castillo 2013). On the other hand, *indica* rice was not initially adopted in peninsular Thailand since *japonica* rice was already produced and consumed, so although *indica* rice was available, it was not necessary. Mungbean was also found at Pacung 1X (163 BCE–137 CE), another site with close links to the Indian Ocean trade network, which illustrates the continuity of the use for this pulse in Southeast Asia (Calo *et al.* 2015; Castillo 2013). The culinary versatility of mungbean, its use as sprouts or as sweet flour, was suited to eastern culinary tradition and encouraged its long-term adoption in prehistoric Southeast Asia. This points to the pulse of globalization associated with the culinary repertoire of Phu Khao Tong and Khao Sam Kaeo at the end of the first millennium BCE.

The situation with other crop translocations in this pulse of globalization is less clear. Cotton and sesame also arrived in southern Thailand from India by the late centuries BCE (Castillo 2013; Castillo *et al.* in press). Archaeobotany and historical linguistics relating to Indonesian sandalwood, coconuts, Areca nut, mango, and citrus fruits provide some limited evidence of the introduction of plants from Southeast Asia into southern India during the Iron Age or even centuries earlier (Fuller 2007; Fuller *et al.* 2011b); the earliest possible introduction may be sandalwood found in the southern Deccan at *c.*1300 BCE. In other words, there is evidence for multiple directions of crop transfers, with beginnings in a pre-urban, and pre-Indianization period of Southeast Asia (Figure 8.2.1), but what differed in the late first millennium BCE was the wider package of cultural practices, from cooking to craft, that showed directionality *from* India.

In contrast to these early introductions from India (beans, sesame, cotton), Indian rice was delayed in its uptake in Southeast Asia. Today most of mainland Southeast Asia cultivates *indica* rice. However, archaeobotanical evidence indicates it did not arrive during the period of first contact with India but probably during the historic period (Castillo 2011, 2013; Fuller and Castillo, in press). *Indica* rice was probably introduced into the Thai-Malay peninsula with wetland farming systems as a result of sustained contact and exchanges with India at a date that still needs to be established (Castillo 2011), but which post-dates the late first millennium BCE (Castillo *et al.* 2015). While *indica* was ultimately a productive addition to farming, it may not have suited established tastes, creating more resistance and delay in its adoption.

Discussion: globalizing and localizing forces in the genesis of agricultural systems

The origins of agriculture did much to make cultural landscapes similar, leading to sedentism, systems of land ownership, and larger areas under cultivation dominated by relatively few taxa (compared with the biodiversity of wider regions). Demographic increase in humans and their domesticates facilitated the spread of human groups, and probably led to a cultural geography in which fewer large language families dominated the lands. Farmers from different regions and cultural traditions could readily exchange crops and the adoption of transferred species was a recurrent process. This began in a big way from the later third millennium BCE in China and India, with links to central Asia and even Africa. Nevertheless, the initial impact of adopted species may have been quite minor, as established Neolithic staple foods continued to dominate agriculture (Boivin *et al.* 2012, 2014). During the first millennium BCE, especially the second half, crop exchanges between India and Southeast Asia intensified. New crops, however, were not always accepted – this is evident with many pulses in Southeast Asia, and once adopted could take centuries or millennia to get serious traction in local cultivation, such as wheat in China or African millets in India. Some varieties did not transfer, such as sticky millets outside Eastern Asia, or the long delay before *indica* rice reached Southeast Asia and began to take land over from the established *japonica* rices. These examples of the selectiveness of adoptions highlight the strong role of cultural traditions in filtering adoptions, otherwise known as localization. Crops had to agree with existing food traditions, acquired tastes and methods of cooking, as well as fitting into cultivation ecologies. New crops could be auditioned and rejected, relegated to marginal status, and in some cases transformed by selecting new mutations, as the examples of glutinous barley, sorghum, or maize in China demonstrate, or green vegetable forms of cowpea and hyacinth bean in East and Southeast Asia suggest (such forms are absent from the African centers of origin and most of India). In the theater of food, the stage and script were set by culinary tradition and the crops were the players.

In terms of globalizing processes, agriculture certainly provided the substrate on which intercultural transfers were facilitated, and led to an increasing range of cultural taxa, and ideas of what to do with them being shared over large areas. In at least some limited cases, this led to deterritorialization of cuisine, such as diverse *dhals* taken up for a few centuries in southern Thailand, or the spread of plate culture (presumably with rice and flat breads) from north to south India. Some broad regions may have had some trends to standardization, as suggested by the distribution of sticky rice and other sticky cereals in East and Southeast Asia. The "Columbian Exchange" of the sixteenth century was only different in degree, in rapidity, and not in kind from earlier food globalization (see also Robertson this volume).

Nevertheless, we do not see all the hallmarks of globalization suggested by Jennings (this volume). The world was not made flat. There was much friction that resisted crop transfers and adoptions. In the context of Monsoon Asia, this was less about topography or real environmental differences and appears to have been mostly about cultural differences, those of taste, or culinary methods and preferences, illustrated by differing approaches to pulses in the Indian world and that of East and Southeast Asia, by attitudes towards the stickiness of rice and other cereals. Perhaps also to links between how cooked foods were eaten, shared or not shared, and perceived in terms of reinforcing relations of commensality or threatening pollution (see Fuller and Rowlands 2011). Newly adopted species were often adapted to local traditions of preparation and serving rather than transforming culinary traditions. In this sense, regional and local traditions persisted and may have even been enhanced despite the increase in trade and translocation. The primary materials, domesticated species, were shared, but the secondary foodstuffs were culturally transformed in line with persistent habits of tradition.

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8.3

Globalization at the dawn of history

The emergence of global cultures in the Mekong and Red River Deltas

Alison Kyra Carter and Nam C. Kim

Introduction

Several decades ago, researchers argued that the earliest forms of cities and complex political systems emerged in Southeast Asia from approximately 500 BCE to 500 CE, a period sometimes referred to as the Iron Age (e.g. Higham 2014) or Early Historic period (Stark 2004). Scholars believed that these early polities were heavily influenced by an essentially unidirectional flow of cultural elements into the region from the more 'advanced' civilizations of ancient India and China (Wheatley 1983; Winzeler 1976). This perspective, based predominantly on textual sources, generally saw the transmission of advanced technology and political models by diffusion, migration, or simple military and cultural imposition (Bayard 1992: 13). Archaeological research in recent decades has altered this view, clearly showing that incipient urbanism and socio-political complexity in mainland Southeast Asia were not simply derivative (e.g. Bellina *et al.* 2014; Bellina and Silpanth 2008; Higham 2012; Indrawooth 2004; Kim 2013; Stark 2006a). Instead, they were outcomes of local trajectories of long-term cultural change working in concert with external contacts. External influence from China and India was important, but this interaction was not the principal cause for the emergence of early states in Southeast Asia (Lam 2011). Moreover, we argue these inter-regional interactions were by no means unidirectional. They were mutually stimulating and part of a burgeoning system of networks and connections involving far-ranging maritime and overland exchange.

During the last few centuries BCE and the first centuries CE trade networks between South Asia, Southeast Asia, and East Asia expanded, bringing goods from South Asia, the Roman and Sasanian Empires, and China to mainland Southeast Asia, while products from Southeast Asia were also moving outwardly through these networks (e.g. Bellina *et al.* 2014: 77; Borrel *et al.* 2014; Glover and Bellina 2011; Lam 2011; Lankton and Dussubieux 2013: 433–34). While urbanism and other socio-political changes were happening at various locations in Southeast Asia, recent archaeological research in the Mekong and Red River Deltas allows for new insights on the process of globalization happening in these contrasting regions of mainland

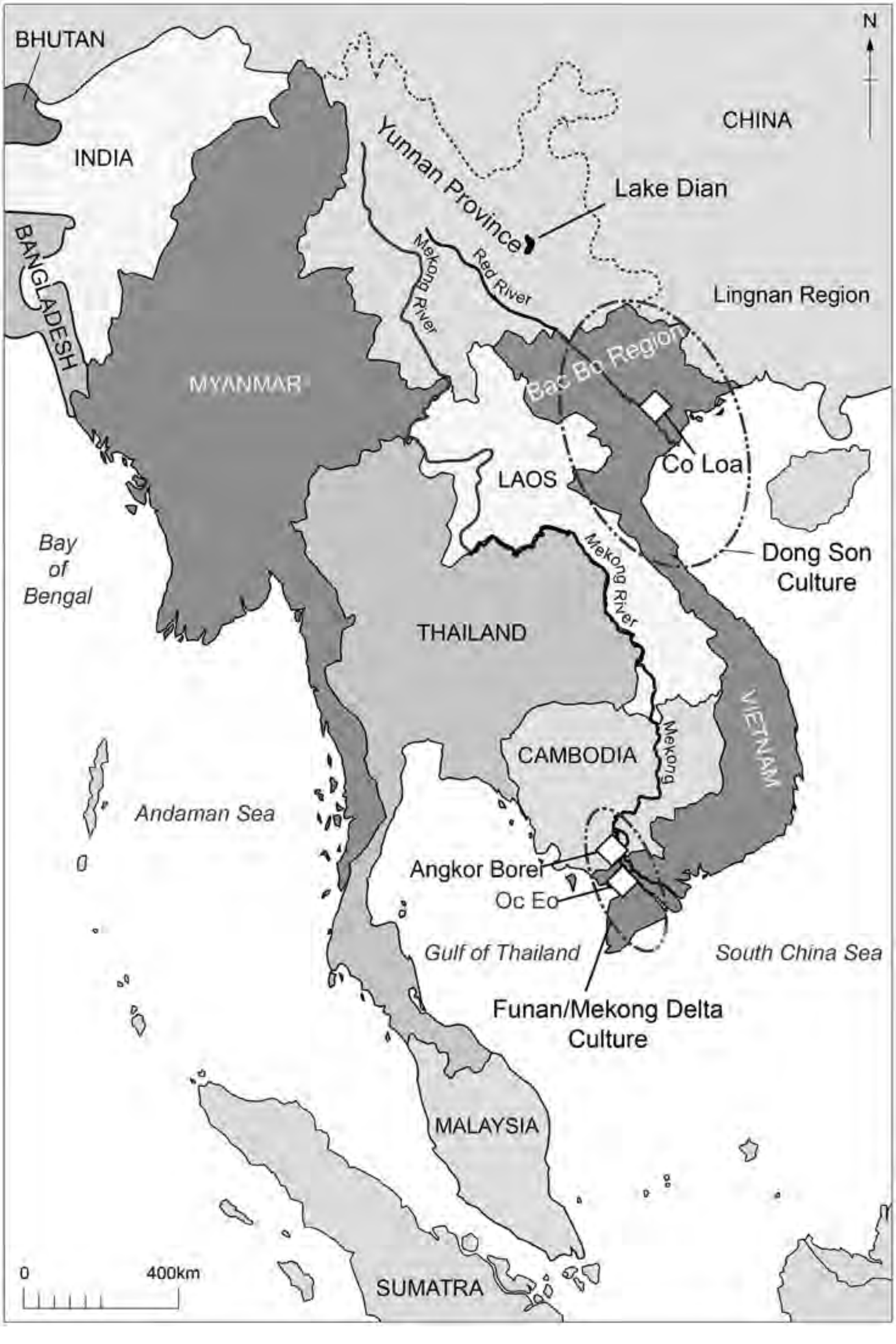

Figure 8.3.1 Map denoting the locations of the Mekong and Red River Deltas and important sites mentioned in the text

Southeast Asia. In both locations expanding globalized trade networks spurred the emergence of what Jennings (2011, this volume) has called "global cultures'.

In this chapter, we argue that the factors leading to the emergence of global cultures accompanied increasing socio-political complexity in each region. In doing so, we explore the impacts of contact with South Asian communities on societies of the Mekong Delta region (in modern-day Cambodia and Vietnam), as well as the impact of contacts with various Sinitic and non-Sinitic, neighbouring communities on those of the Red River Delta (in modern-day Vietnam) (Figure 8.3.1). We acknowledge that there was interaction with South India in Vietnam, especially central Vietnam (e.g. Lam 2011; Nguyen *et al.* 2006) and Sinitic contact in the Mekong Delta; Chinese historical documents describing the Mekong Delta region are amongst the earliest evidence we have for this region (Ishizawa 1995). Nevertheless, we argue that it was primarily South Asian contact in the Mekong Delta and contact with neighbouring cultures in northern Vietnam that had the largest impacts on these regions, respectively. For northern Vietnam in particular, many of these connections involved cultural interactions gradually marked by elite leadership and emulative strategies that capitalized on ties between a kaleidoscope of societies that were not necessarily Sinitic during the mid to late first millennium BCE (see Brindley 2010 and Allard 2014). In both cases, we see political transformations that resulted in emergent global cultures and political consolidation.

Foreign influences in Southeast Asia: deconstructing 'Indianization' and Sinicization

The nature of contact and foreign influence in the Mekong and Red River Deltas was distinctly different between the two areas and affected the long-term developmental trajectories in each region. In the Mekong Delta and other parts of mainland Southeast Asia, contact with South Asia appears to have been largely commercial and ideological. The geographic distance between South Asia and the Mekong Delta suggests that South Asian influence involved direct contact with South Asian people and not a diffusion of goods and ideas. It is likely that South Asian craftsmen, traders, monks, and brahmans travelled to Southeast Asia on the monsoon winds, staying in Southeast Asia for several months until the winds changed (Higham 2014: 276). In the Thai–Malay peninsula for example, there is strong evidence for the presence of South Asian craftsmen at the site of Khao Sam Kaeo (Bellina *et al.* 2014). While a Chinese historic document discusses an Indian ruling over the Funan civilization in the fifth century CE, there is no archaeological evidence to support Indian rulers in Southeast Asia, nor Indian imperial interest in conquering parts of Southeast Asia (Higham 2014: 284). Other scholars have argued against the presence of Indian elites in Southeast Asia, arguing instead that as the more advanced seafarers, it was Southeast Asian peoples who may have travelled to India and brought aspects of Indian culture back to Southeast Asia (see Vickery 1998: 51–60). However, material evidence for this aspect of contact is also lacking. While we do not have clear material indicators for the nature of contact, archaeological evidence (discussed below) suggests that contact with South Asia was perhaps driven in part by Southeast Asian agents and did not include colonial motivations from South Asian rulers.

By contrast, the situation in the Red River Delta was marked by two successive phases of contact. In the earlier phase, which spans much of the first millennium BCE, there is evidence of contact between Red River Delta societies and those of the Lingnan and Yunnan areas of China. As will be discussed below, the data indicate exchange and parallels in cultural practices, as reflected by certain categories of artefacts and iconography (see Allard 2014 and Yao 2010). The second phase saw a gradual influx of that might be considered Sinitic or Central Plain cultural practices and materials, whose start likely coincided with the emergence of the imperial Han (see Higham 2014: 198). It is within the Western Han period that certain materials appear in northern Vietnam, such as ceramic roof tiles, which reflect degrees of either indirect or direct contact with the Central Plain communities. Early on in this phase, contact may have been indirect, with societies of the Lingnan and Yunnan operating as buffers or filters (Allard 2014). It is only later, specifically during the Eastern Han, that we see contact evolving into forms of both colonization and hybridization. This is supported by the marked increase in Han-style artefacts and architectural constructions in the second and third centuries CE, such as brick tombs, which correspond to either elite Han or possibly an emerging Han-Viet elite (Pham 2004: 203). It is likely that contact in this second phase is marked by actual arrival of ethnically Han groups in large numbers, generally commencing after a Han expeditionary force, led by Ma Yuan, arrived and quelled the local Trung Sister uprising in the first century CE (Taylor 2013: 21–22).

'Indianization' and the Mekong Delta

Early historians and scholars often cited Indian influence as the primary instigator for the emergence of complexity across mainland Southeast Asia (e.g. Coèdes 1968; Wheatley 1979). Many historians, relying primarily on historical evidence, argued that the adoption of Indian concepts of kingship and religion were necessary for the consolidation of power by Southeast Asian elites (Hall 2010: 51–52; Kulke 1990; Mabbett 1997; Van Leur 1955; Wheatley 1979, 1983). While many of these scholars allowed for considerable agency amongst Southeast Asian people in adapting aspects of Indian religion and socio-political organization, there was a belief that pre-existing patterns of tribal or chiefdom organization was preventing elites from institutionalizing their power into a state or kingdom. These historical perspectives specifically note that it was elites who were embracing aspects of Indian, specifically Hindu, culture (e.g. Coèdes 1968: 33–34; Hall 2010: 51; Van Leur 1955: 103–04; Wheatley 1979: 295).

In contrast, interpretations based on recent archaeological work highlight the importance of intra-regional exchange and interaction in Southeast Asia and the active role of Southeast Asians in spurring socio-political complexity (Bellina 2007; Bellina *et al.* 2014; Bellina and Glover 2004; Carter 2013; Christie 1990, 1995; Lam 2009, 2011; Higham 2002, 2014; Hung *et al.* 2013; Manguin 2011). In these models, the focus has shifted from the importance of Indian influence to local elite control over the trade of exotic prestige goods to communities within Southeast Asia. These goods could be used to create alliances with other elites and inland communities, and obtain raw materials, forest products, and other items that could be traded with foreigners (Higham 2014: 278, 286). These studies emphasize pre-existing exchange networks between elites, especially in the South China Sea, and the role of peer-polity interaction in the emergence of early states in mainland Southeast Asia (Bellina *et al.* 2014; Christie 1995; Lam 2009, 2011; Hung *et al.* 2013).

Of the many areas of mainland Southeast Asia that saw Indian influence, it is the Mekong Delta region that is frequently cited as the location of one of the earliest complex polities to emerge in Southeast Asia (e.g. Coèdes 1968; Higham 2014; Stark 2004) (Table 8.3.1). The region was initially known from the texts of Chinese ambassadors who visited the area in the third century CE and described a civilization called Funan (Ishizawa 1995; Pelliot 1903). Funan was believed to have been powerful kingdom and could facilitate access to maritime trade with India for the Wu Dynasty in southern China (Ishizawa 1995). The ambassadors met a king named Fanzhan and noted that he controlled a large territory and sent emissaries to India (Ishizawa 1995: 14–15). They also observed walled villages and palaces, an economy that included taxes, craft production and agriculture, and the presence of archives and use of a script (Coedès 1968).

Table 8.3.1 A summary of major developments in the Mekong

Dates	*Development in Mekong Delta*
500–300 BCE	Evidence for habitation in the Mekong Delta at Angkor Borei, Cambodia (Stark 2004) and Go Thap, Vietnam (Manguin 2009).
200 BCE–200 CE	Vat Komnou cemetery in use at Angkor Borei (Stark and Sovath 2001).
0 BCE/CE	Construction of some of the major canals around Angkor Borei. A brick in the canal linking Angkor Borei with Oc Eo was found to date from 160–200 CE (Stark *et al*. 2006: 117).
0–600 CE	Construction of the brick wall around Angkor Borei (Stark 2006b).
200–300 CE	Construction of moats around Oc Eo (Manguin 2009).
200–300 CE	Wooden Buddha sculptures found in Vietnam (Canh and Khoo 2003).
200–300 CE	Chinese visitors write of their visit to 'Funan' (Ishizawa 1995).
611 CE	Oldest dated Khmer language inscription found at Angkor Borei (Coedès 1942: 21–23).
Mid-seventh century CE	Examples of some of the earliest Khmer stone sculptures found at Phnom Da (Dowling 1999).
500–00 CE	Funan begins to decline (Stark 2004).

Historians and archaeologists agree that the two cities of Angkor Borei, Cambodia and Oc Eo, Vietnam (Figure 8.3.2), located just 70 km from one another, were centres of this polity. The earliest habitation in this area dates to approximately 500 CE (Stark 2004; Manguin 2009), with a densely packed cemetery at Angkor Borei dating to just a few centuries later (Stark and Sovath 2001). There is evidence for control of labour in the early first millennium CE in the construction of brick walls and moats that surround both Angkor Borei (300 hectares) and Oc Eo (450 hectares) (Stark and Sovath 2001; Stark *et al* 2006). The cities were also connected to one another and other sites in the region by an elaborate canal network, parts of which date to 0 BCE/CE (Bourdonneau 2003; Sanderson *et al*. 2003, 2007; Stark *et al*. 2006:117).

Excavations at the site of Oc Eo by the French archaeologist Louis Malleret (1959–63) uncovered evidence for craft production and numerous goods from India, as well as a small number of objects, such as coins, from the Roman and the Sasanian Empires. This and more recent fieldwork at Oc Eo have confirmed its place as a cosmopolitan trading centre (Manguin 2009). Fieldwork at both cities, as well as smaller settlements, has identified numerous brick structures and burials (Dao 1998; Manguin and Vo 2000; Stark *et al*. 2006). Although the Chinese documents describe writing in this region by the third century CE, the earliest dated Khmer inscription, found at Angkor Borei, was not recorded until 611 CE (Coedès 1942). The Sanskrit and Khmer inscriptions that date from the sixth to eighth centuries describe the presence of a socially stratified society, with elites and rulers making donations to temples (Lustig 2009; Vickery 1998). Khmer sculptures of Indian deities also appear around the same time as the Khmer inscriptions, with several of the earliest examples found on the small hill of Phnom Da, near Angkor Borei (Dowling 1999). It is clear that by the mid-first millennium CE, the Mekong Delta was a sophisticated urban area with walled cities, settlements connected to one another by an extensive canal system, writing, sculpture and craft production, and monumental construction in the form of brick walls and canals.

Multiple factors make up the process of emerging complexity and early state formation in mainland Southeast Asia (Higham 2014: 273). The historian Ian Mabbett has noted that we have not yet been able to 'describe the cultural mechanism that gave importance to Indian culture in Southeast Asian kingdoms' (1997: 350). Nevertheless, we can see the material remains

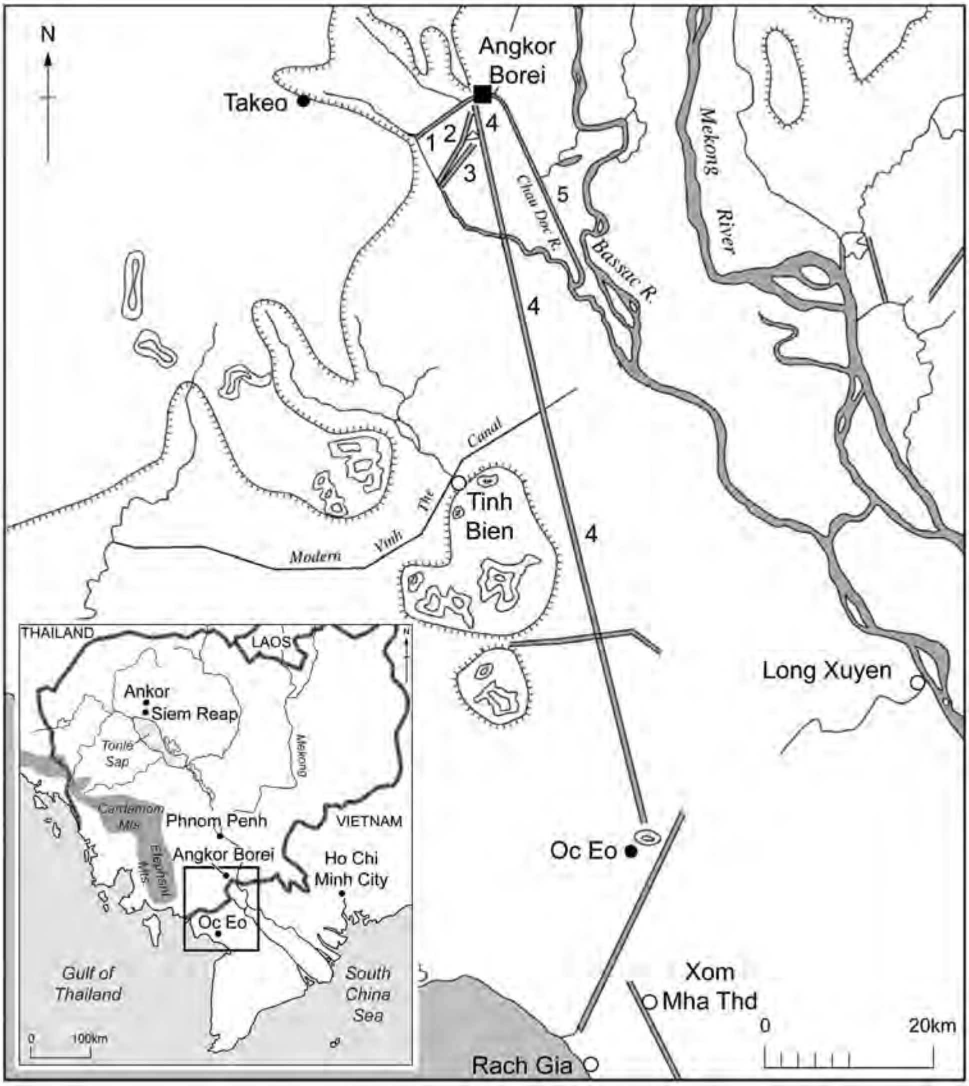

Figure 8.3.2 Map showing the locations of Angkor Borei and Oc Eo and the major canals around these two cities. The four major canals are noted as linear traces and numbered. Modified and reprinted from Sanderson *et al.* 2007 with permission from Elsevier

of an emerging global culture in the Mekong Delta that blended the local cultural traits with influences from South Asia.

Sinicization and other regional influences on the Red River Delta

A few decades ago, scholars argued for a general absence of significant socio-political complexity or forms of urbanism in the Red River Valley prior to Sinitic intervention. In this view, urban development only began to appear in Bac Bo (northern Vietnam) after the area was annexed by the Han Empire during the first century CE (Wheatley 1979: 292; 1983: 420–21). Accordingly, the development of complexity was essentially imposed by a Chinese presence and this view generally downplayed local or indigenous trajectories of urbanism and state-like political authority in northern Vietnam prior to the first millennium CE. Although this argument was tenable decades ago, given a general paucity in reliable archaeological data to argue otherwise, this is no longer the case. Recent archaeological research points to the presence of pre-Han, local trajectories towards greater levels of complexity during the first millennium BCE.

A state-level polity had emerged in the Red River Delta by approximately 300 BCE, with tremendous control over resources, wealth, and labour, as materially manifested by the founding of, and constructions at, the Co Loa site (Kim 2010, 2013; Kim *et al.* 2010). Currently, the evidence suggests overall that an imperial Sinitic impact is not truly significant until the closing centuries BCE (Ha 1997; Hoang 2002; Nishimura 2000; Pham 1996; Tong 2004). However, it is also clear that interaction with societies in outside areas, such as parts of present-day southern China, were a vital part of cultural development in the Red River Delta. Thus, while a Sinicization model is spurious, regional influences still need to be considered in a longer-range appreciation of emergent globalization and relationships marked by interaction between various regional cultures (Table 8.3.2).

Encompassing some 600 hectares, Co Loa possesses a monumental system of earthen rampart enclosures and associated canals and moats, with an outermost earthen rampart wall measuring 8 km in circumference (Figure 8.3.3). Much of this rampart and moat system remains intact today in various states of disrepair, and Co Loa is emblematic of a very early form of urbanism for mainland Southeast Asia. It is the largest of a collection of peer settlements within a contemporary regional pattern marked by water management and large-scale earthworks, signalling a trend toward more elaborate forms of urbanism and political organization that would follow during the early historic period. The material record for the region provides strong indications that inter-regional interaction would have been quite significant for cultural change occurring during the first millennium BCE, culminating in the emergence of the Co Loa Polity (*c.*300–100 BCE), which was responsible for the settlement's founding (Kim 2013). Findings from field investigations suggest that the Co Loa case constitutes a prehistoric example of significant political complexity, one of the earliest for mainland Southeast Asia. As will be discussed below, centuries of increasing connectivities contributed to the emergence of what might be considered a 'global culture' for Early Historic communities in this region.

Table 8.3.2 A summary of major developments in the Red River Delta

Dates	*Development in Red River Delta*
1000–600 BCE	Go Mun Culture phase, with increased bronze working and interregional interaction (Pham 2004)
500–300 BCE	Early Dongson Culture phase, with greater settlement expansion into lowlands, agricultural intensification, increase in military practices, and social differentiation (Higham 2014)
300 BCE–0	Florescence of Co Loa Polity, founding of capital settlement, monumental rampart construction (Kim 2013); Growing prominence of 'Southwest Silk Road' system, connecting RRD with other areas (such as Yunnan) (Yang 2004)
0–300 CE	Han annexation of Bac Bo solidifies in first century CE (Taylor 2013); emergent Han-Viet elite class in second and third centuries CE, as reflected by increase in Han-style artifacts and architecture (Pham 2004)

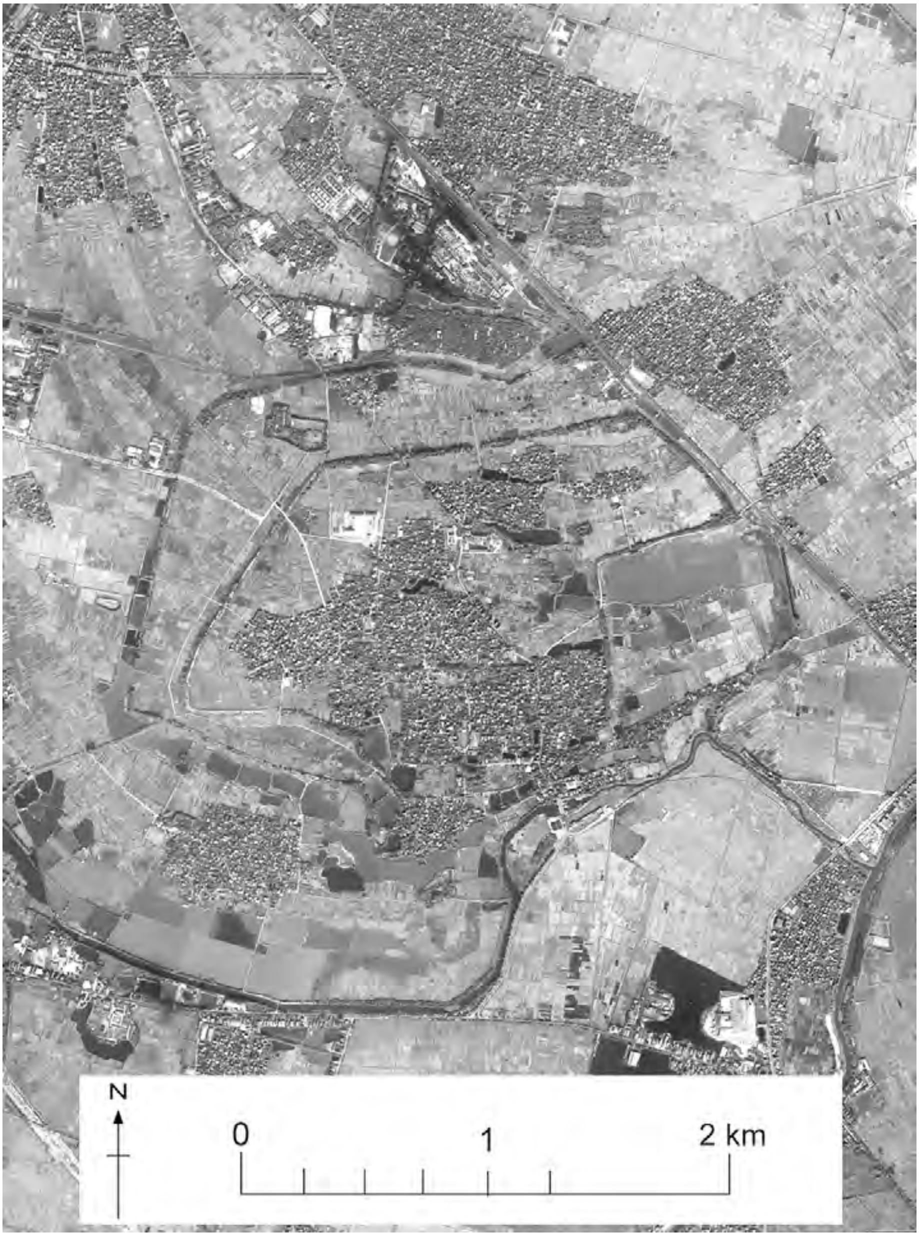

Figure 8.3.3 Satellite image of Co Loa, with the three rampart enclosures still intact in various states of disrepair. Imagery provided by DigitalGlobe and ArchaeoTerra

Evidence for these connectivities throughout this region can be seen in the Late Neolithic, with data showing signs of shared farming practices and associated material culture (see Bellwood 2005 and Higham 2004). Dating to between 2500 and 1500 BCE, materials from northern Vietnam reflect a widespread Neolithic expression characterized by a distinctive style of incised and zone-impressed pottery decoration, and similar artefacts have been found in parts of southern China and Thailand (Bellwood 2005: 132). Regarding links between southern China and northern Vietnam during the Neolithic, another illustrative example is the stone shovel. Manufactured in southern Guangxi during the second millennium BCE, these appear to have made their way as original objects throughout parts of Guangxi, Guangdong, Hainan Island, and areas of northern Vietnam (Francis Allard, personal communication 2015).

These connections appear to have strengthened throughout the Metal Age, and by the mid-first millennium BCE, communities within the Red River Delta were well positioned to take advantage of access to an important conduit for movement and interaction, namely the Red River. A variety of artefact classes found in both Bac Bo and Lingnan contexts speak to these connections, particularly bronze vessels, tools, and weapons (see Wei and Shiung 2014). As further illustration, bronze pediform-shaped axes found in the Red River Delta have clear parallels found in south-western China (see Yao 2010: 217). Ultimately, the Delta occupied a nodal position in the developing maritime trade which would eventually connect the coastal communities of Southeast Asia, India, and beyond, even all the way to the eastern provinces of the Roman Empire (Higham 2014: 331; see also Nishimura 2000 and Yang 2004).

As much of this time frame predates the arrival of the imperial Han in the Red River Delta, it would appear that the bulk of the inter-regional interaction and mutual influence involved an assortment of regional communities, including those of the Dian Culture, the Dongson Culture, and others in parts of northern Vietnam and further afield (see Calo 2009, Reinecke 2011, and Yao 2010). This system of linkages would also include many of the societies of southern and southeastern China, generally subsumed under a category of 'Yue', with the present-day provinces of Guangxi and Guangdong. Many of these societies appeared to have shared affinities in lifeways, as reflected by the material record. These links connected both elites and non-elites throughout the region, as attested to by iconographic depictions on bronzes, for instance (Calo 2009).

It is only during the closing centuries BCE that a marked Sinitic impact is discernible in northern Vietnam's material record, subtle at first and more pronounced by the first century CE. As will be discussed below, it is during this later period that a growing Sinitic imperial power in the Central Plain would begin to affect northern Vietnam. After the third century BCE, political transformations of northern Vietnam were marked by elite leadership and emulative strategies that capitalized on both direct and indirect interactions with 'Yue' and Sinitic societies to the north, resulting in political consolidation at Co Loa. This development would also accentuate the globalizing process already underway. It is this set of diverse influences that combined to create a global culture as reflected in the archaeological records of the Dongson Culture settlements and at the Co Loa site. Ultimately, the evidence indicates that a unidirectional model of diffusion, as espoused by a Sinicization model, is far too simplistic to account for the socio-political and economic changes reflected in the archaeological record of the late first millennium BCE. The material data for these trends are highlighted below.

Globalization and global cultures in the Mekong and Red River Deltas

To be sure, many researchers would argue that globalization is a distinctly recent or modern phenomenon. However, we follow Feinman (this volume) in taking a broad definition of globalization, acknowledging that globalization has a deep history and does not necessarily require that the entire planet be directly tied together. As noted by Knappett (this volume), not everything needs to be connected, but the idea is that everything could be connected. Thus, we are not imposing a modern notion of globalization onto the past, but seek to demonstrate that certain general features and outcomes associated with a globalizing process are discernible in the ancient past.

We find especially compelling the concept of a global culture proposed by Jennings (2011: 21, this volume), in which communities not only participated in long-distance connections, but were transformed by them. It is this concept of a global culture that we find especially useful when considering the changes happening in mainland Southeast Asia during this Early Historic period. As Jennings argues (2011: 28, this volume) an increase in long-distance interactions is not equivalent to globalization, instead the process of globalization stimulates cultural changes that reflect tensions between the pre-existing local cultures and the increased connections, contacts, and influences provided by long-distance connections.

Archaeologically speaking, there are certain material signatures that can reflect these patterns of cultural change, which are particularly recognizable in frontier areas that tend to be zones of cross-cutting social networks and relationships (Allard 2006; Lightfoot and Martinez 1995; Stein 2006; Tronchetti and van Dommelen 2005; Yao 2012). Jennings (2011: 121–42, this volume) has proposed 'eight hallmarks of global culture' that assist in identifying archaeological correlates for the process of globalization. In this section we use the archaeological records of the Mekong and Red River Deltas as case studies to evaluate select elements of Jennings' hallmarks. However, we must note that not all of Jennings' hallmarks are a good fit, partially due to the incomplete archaeological records in each region. For this reason, we acknowledge that we are unable to fully evaluate the applicability of the eight hallmarks for the two cases in Southeast Asia.

Nevertheless, what we find most compelling about Jennings' notion of global culture is the dynamic tension between the global and the local. It is this 'dual homogenizing/heterogenizing impulse' and especially Jennings' (2011, this volume) hallmarks of cultural homogeneity, heterogeneity, standardization, and unevenness that are common to interactions along cultural and geographic frontier areas. Although global cultures were largely created by a mix of socially differentiated agents, we argue that elite members of our respective societies facilitated their consolidation of power by coopting emerging components of these new global cultures. However, as Jennings (this volume) observes, in order for global cultures to be sustained, they must spread into the broader population. In some cases, we suspect that various rituals and cultural practices would have served as important mechanisms for global cultures and associated materials to have further evolved and permeated back into non-elite contexts.

The emergence of a global culture in the Mekong Delta

Although merchants and craftsmen from South Asia were likely important components of the complex interaction networks happening during the Early Historic periods, it was Indian ideology that was the primary influence in the creation of a global culture in the Mekong Delta. Emerging elites appear to have embraced Indian deities, constructed temples in their honour, and used inscriptions, in both Khmer and Sanskrit, to detail their donations. These became visible material markers of their access to resources, emerging status, and connections to both South Asia and to the deities themselves. The adaptation of Indian religion is one example of both cultural homogenization, in which local cultures begin to adopt foreign objects and ideas as their own (Jennings 2011: 132) and heterogenization, in which foreign concepts can be localized in diverse ways (Jennings 2011: 134).

In the Mekong Delta, scholars have suggested that the syncretism of Hinduism/Buddhism with indigenous belief systems was one method in which diverse local traditions could be standardized under shared religious vocabulary (Aeusrivongse 1976; Lavy 2003: 36). At the same time, variations in the popularity of different Hindu gods across Cambodia reflected a heterogeneity in how deities were adapted. For example, the god Vishnu was most predominant in the Mekong Delta region, while elites in northern Cambodia, Thailand, and Laos had stronger affiliations with the god Siva (Lavy 2003). However, by the mid-to-late first millennium CE, pre-Angkorian rulers had popularized Harihara, a combination of Siva and Vishnu. Although Harihara was present in India, the prevalence of this deity in Cambodia appears to have represented an amalgamation of the different ruling styles in each region (Lavy 2003).

Similarly the use of inscriptions as a part of the establishment of temples also exemplifies the tension between the global and the local. Most inscriptions contained both Sanskrit and Khmer, with the Sanskrit portion describing Hindu gods and their relationship to the donor, while the Khmer portion detailed donations to the temples and other administrative concerns (Lustig *et al.* 2007). The use of Sanskrit tied these elites into the international Sanskrit cosmopolis (Pollock 2006), while the local connections were emphasized in the use of the Khmer terminology for elites and rulers. The use of Khmer titles for elites indicates the presence of a local social hierarchy that was not imported from India (Vickery 1998: 21). Therefore the adoption of Indic ideology and the use of inscriptions provided means for elites in the indigenous hierarchical system to materialize their power and status as part of the extra-local network.

The movement of these globalized goods and ideas across the landscape was facilitated by the use of both natural and man-made water networks, creating a time–space compression, Jennings' first hallmark of globalization (2011: 123). In the Mekong Delta, a series of canal networks connected Angkor Borei to Oc Eo, and these cities to smaller sites in the region (Bourdonneau 2003; Sanderson *et al.* 2007). The relationships between the canals and the coasts or nearby river systems is still not clear (Bourdonneau 2003), but certainly connections to these water-based means of transport and communication would have also facilitated the spread of new goods and ideas from these urban centres to sites further inland or along the coast.

The variety of transportation and communication networks also produced geographic disparities in influence, which resulted in certain areas that came under the control of important centres, with others outside the sphere of influence. Elites in the Mekong Delta held sway over their immediate areas, but it is not clear how far their reach extended inland, resulting in unevenness and a potential 'power geometry' (Jennings 2011: 129–30). Exchange of prestige goods, such as glass and stone beads, suggests relationships between people in the Mekong Delta and those further inland in northwest Cambodia and Northeast Thailand (Carter and Lankton 2012; Carter 2013). However, other regions, such as communities in south-eastern Cambodia, may not have been as clearly integrated as these communities were exchanging and using different types of beads (Carter 2010, 2012, 2013, 2016). Mapping of early inscriptions highlights regions that had greater numbers of inscriptions, which by extension represented elites who embraced the emerging global culture and had access to resources to make donations to temples (e.g. Jacob 1979; Lustig *et al.* 2007). Overall, the influence of elites in the Mekong Delta seemed to have waxed and waned over time (Stark 2006b).

Unevenness is also represented by the growth of the cities of Angkor Borei and Oc Eo, and especially the importance of Oc Eo as a cosmopolitan centre. Archaeological evidence (discussed above) points towards Oc Eo's role as a trading entrepôt, which saw influences from South Asia, Central Asia, and Rome (Manguin 2004, 2009). Although goods from the Roman and Sasanian Empires made up a small portion of the overall assemblage at Oc Eo, it is important to note that these types of goods are not widespread at inland sites. Only a small number of sites, notably the peninsular Thai site of Khao Sam Kaeo, also received goods from East and South Asia and the Mediterranean (e.g. Bellina *et al.* 2014; Borrel *et al.* 2014). However, Khao Sam Kaeo did not develop into the major urban centre and state seen in the Mekong Delta. Other ornament categories, such as gold jewellry produced in an Indian style, and beads made from quartz and garnet, make up a significant part of the assemblage at Oc Eo (Malleret 1962), but are found infrequently outside the Delta. That particular types of ornaments were not widely traded outside the walled cities of Oc Eo and Angkor Borei points towards at least partial control over the exchange of imported objects by elites. However, we must also consider that there may have also been down-the-line exchange of both goods and ideas by non-elites.

One critical aspect of the globalization process involves expanding the global culture outside of elite circles (Jennings 2011, this volume). While elites in the Mekong Delta appear to have been the primary adopters of Indian ideology and culture, they also facilitated the spread of the global culture. Hindu gods incorporated local ancestor spirits, absorbing the broader community into the newly adopted socio-religious structure. Khmer inscriptions describe the donation of labourers to Hindu temples, thereby integrating the lower-ranking members of society into this aspect of the global culture (Vickery 1998). The South Asian *kundika*, a spouted ritual vessel, was transformed into the Southeast Asian *kendi* (Bellina and Glover 2004: 80). Fine-paste, buff-colored *kendi* vessels were common across Southeast Asia during the first millennium CE, with a likely production centre in the Mekong Delta (Fehrenbach 2009: 154).

One problematic aspect of globalization is that it produces dependencies that are susceptible to events happening elsewhere in the world, thereby creating vulnerabilities, a final hallmark of global cultures (Jennings 2011: 139). In the Mekong Delta this can be clearly seen in the decline of Funan, largely believed to be related to shifting long-distance trade networks from the Delta region to Srivijaya in Sumatra (Stark 2004:100). The site of Oc Eo appears to have been abandoned by the mid-first millennium CE (Manguin 2009), although parts of Angkor Borei may have still been inhabited into the second millennium CE (Stark and Sovath 2001). However, the global culture that emerged in the Delta persisted and transformed, as power centres moved further inland over the next few centuries, eventually settling near the Tonle Sap lake (Stark 2004, 2006b; Vickery 1998).

The emergence of a global culture in the Red River Delta

Jennings' (2011, this volume) notion of global culture emphasizes the stimulation of cultural change that reflects tensions between pre-existing local cultures and increased inter-regional connections. In examining the emergence of a global culture in the Red River Delta, we see this process happening in two general phases. In the first phase, a global culture emerged due in part to contact between the Red River Delta and nearby societies in northern Vietnam and southern China throughout the Bronze and Iron Ages of the first millennium BCE. A combination of material data and historical text indicates the Red River Delta was an important trade hub on the eve of the Common Era (Nishimura 2000: 47), and was also incorporated into the broader Southwest Silk Road system (Yang 2004: 287).The second phase of the emerging global culture involved the adoption of more explicitly Sinitic elements, related to the expanding Han Empire. However, this second phase of the emerging global culture was cut short due to the region's annexation by the Han in the first century CE. In some ways, the Red River Delta's set of inter-regional interactions and associated outcomes is somewhat analogous and related to developments in the Lingnan region to the north. As Allard (this volume) notes, different patterns of inter-regional interaction evolved throughout what he refers to as the pre-imperial and imperial periods, resulting in a complex range of cultural changes.

For the Red River case, mid-first millennium BCE inter-regional interactions created important social and economic links between a constellation of societies located along the Red River and the coastline of northern Vietnam. For some, this collection of societies corresponds to various, historically referenced 'Yue' communities of Lingnan described in Sinitic texts (see Brindley 2010), as well as others, such as the Dian Culture communities of the Yunnan. Of the many exchange routes radiating in and out of the Red River Delta, one of the more significant ones is a link with the Yunnan Plateau. Allard (1999: 83) argues that the apparent identical artefact types encountered in both regions indicate the artistic or functional adaptation of one tradition's elements by the other, a two-way process which may have benefited the almost simultaneous emergence of Bronze Age complexity.

Not entirely clear are the mechanisms and nature of exchange, but the material record shows the common presence of certain artefacts, iconographic motifs, and other cultural elements in the Yunnan and Red River regions. The cultural practices associated with the production and movement of materials, innovations, and potentially shared ideological symbols between various societies, some of which may have been involved in competitive and even militaristic relationships, speak to the existence of a peer-polity network (see Yao 2010). At present, the evidence suggests the presence of a range of possible agents, whether elite or non-elite, and forms of interaction, which may have encompassed relationships that could have been peaceful, commercial, competitive, emulative, warlike, or migratory in nature (Higham 2014; Kim 2013; Murowchick 2001; Yao 2010). Given the variable range of interactions, it seems fair to raise the possibility of peer-polity networks, since it would seem that mutually impactful and pivotal socio-political changes were occurring in both regions throughout the first millennium BCE.

An important class of material indicator for this interaction comes in the form of Dongson Culture materials, particularly the renowned ceremonial bronze drums, known in Vietnam as Dongson drums. Although these drums were found in scattered locations throughout Southeast Asia, they have been recovered in highest concentrations in south-western China and northern Vietnam, reinforcing the notion that Dian and Dongson Culture societies were engaged in important forms of interaction. The considerable interaction occurring between Bac Bo inhabitants and their Yunnan neighbours throughout the chronological sequences leading into the Dongson phase (*c.*600 BCE–200 CE) led to cultural affinities. The drums were likely part of important local elite cultural symbols (Pham 2004), in which the production, ritual uses, and circulation of these drums, and perhaps of other bronzes, may have been part of political and leadership strategies that linked elites of numerous villages and communities, and that ultimately fostered the continued development of complex political organizations. The exchange of these objects produced a 'common idiom' in a process of standardization (Jennings 2011: 127–29) and emerging cultural homogeneity (Jennings 2011: 132–34).

A comparison of iconographic styles found in both Dian and Dongson Culture communities reveals striking parallels. As noted by Yao (2010: 230), certain classes of bronze in northern Vietnam, such as the *thap* ritual vessel, were commissioned by elites in multiple locations to indicate status (see also Higham 1996: 110). Additionally, despite the complex production process required to produce these objects, the shape and motifs on the drums appear to have become standardized within these two regions. The engraved pile-built dwellings on Dongson bronze drums share incredible similarities with the Shizhaishan bronzes of the Yunnan (Ruan 2006: 147). In addition, for various Dongson drums we can see certain common cultural elements that reflect lifeways in other parts of Southeast Asia, such as elaborate boat and feathered headdress motifs (Calo 2009: 23).

Interestingly, while the possession of certain bronzes certainly evokes the notion of elite status, one might also argue that a global culture went beyond elite domains of activity. The iconography on various bronzes depict scenes of everyday life and ritual activities, such as music playing, rice pounding, and others. Many of these drums depict similar domestic scenes, with houses raised above ground level on piles (see Higham 1989: 201–02 and Higham 2014: 200).

While the use and iconography on the drums reflects a growing cultural homogeneity, a closer examination of decorative motifs on the drums also reveals 'localized elements' indicative of cultural heterogeneity (Jennings this volume). Dian Culture drum specimens reflect cultural influences from the immediate and wider environs of the Lake Dian area, with equestrian motifs presumably from north-western Yunnan and western Sichuan, combining with agricultural motifs related to the local Lake Dian region (Calo 2008: 213). These contrast with the stylized bird symbolism more typically featured on bronze drums and other products found in northern Vietnam. These stylistic variations speak to nuanced differences of cultural practice and symbolism based on regional heterogeneity.

By the third century BCE, the Delta would witness the onset of the Co Loa Polity period (*c.*300–100 BCE), which was associated with the establishment of the Co Loa settlement as a form of early city and political capital (Kim 2013). This represents a major shift in the area's socio-political topography, and the shift was attributable in part to the developing global culture of the previous centuries. There is evidence to suggest that the growing complexity in exchange networks and cross-regional ties had a profound effect on the process of political centralization that resulted in the formation of the Co Loa Polity. However, the area's significance as an important exchange node did not emerge overnight. This gradually developing interconnectivity, while a source for tremendous economic and political change, made the area's communities increasingly dependent on occurrences in areas further afield.

Co Loa is part of a larger Southeast Asian pattern of prehistoric moated settlements. However, it is far larger in scale and size than virtually all of its contemporary peer sites. It is likely that the interactions with northern societies can partially account for this difference, and it provides an example of the 'power differentials' and unevenness found in globalized societies (Jennings this volume). Surveys and excavations at Co Loa have uncovered thousands of ceramic roof tile fragments, as well as signs of stamped earth wall-building techniques, dating to the Co Loa Polity period (Kim *et al.* 2010). What is striking is that the use of roof tiles and stamped earth is absent outside of this settlement prior to the Common Era. Although these architectural traits predate formal Han annexation of the area, the use of stamped earth and roof tiles reflect clear affinities with Sinitic civilization, while also indicating the role of political elites in effectuating the emergence of a global culture.

The roof tiles are a notable example of the dynamic tensions found in global cultures. Roof tiles have been recovered from second century BCE Yue contexts in areas of southern China (Francis Allard, personal communication 2014). The Co Loa tiles share stylistic similarities with Lingnan examples, which in turn are similar to examples from China's Central Plain. This serves to underscore the possible presence of a Yue sphere of interaction, wherein Co Loa political elites were potentially engaged in indirect contact with the Central Plain societies such as the Qin and Han through counterparts in the Lingnan. Important differences, however, must be noted. The decorative motifs on roof tiles at Co Loa depict imagery of rolling clouds (Yamagata and Nguyen 2010) and star-shaped designs reminiscent of local motifs found on Dongson drums. They lack evidence of Chinese script that appear on examples from the north. In this way, exotic and foreign symbols and practices were being appropriated by certain elite groups in the area and combined with local ideologies and cultural practices. Accordingly, it would seem that Co Loa elites may have been exercising leadership strategies related to emulation, practices which involved the appropriation of exotic symbols of authority to be used locally for the legitimization of political power.

Arguably, elites of Co Loa society were employing political strategies that capitalized on pre-existing exchange networks and ties, thereby accentuating and further shaping global cultures in the region. Ultimately, these elite leadership practices for political legitimization and competition contributed to the ongoing development of global culture, even if 'globalization' was not an intended objective.

Indeed, the advantages and successes enjoyed by the area's inhabitants would have been one of the precipitating factors for the annexation of the region by the Han Empire, a process that began during the first century BCE and was solidified at 43 CE. This foreign intrusion can be viewed as a negative outcome for local communities, and can thus be interpreted as a consequence for a type of 'vulnerability' seen in globalized societies (Jennings 2011, this volume). The Han foray into the south satisfied two major objectives. One was clearly economic by nature. The area was likely prized by the imperial Han that recognized its economic and commercial value, given its location, access to key waterways, as well as access to various tropical products. Han merchants, for instance, were very interested in goods such as rhinoceros horns, elephant tusks, tropical bird feathers, pearls, aromatic woods, as well as slaves, and rulers in the Central Plain had already been coveting these items for centuries (Taylor 2013: 21). On another front, the Han were attempting to legitimize their dynastic regime by contrasting it with its predecessor, namely the Qin, and one way to do so was to demonstrate the projection of power further into a barbarian and exotic world (see Lewis 2007). In the end, the region was annexed by the Han, starting Sinitic periods of domination that came to a permanent end only in the tenth century CE (Taylor 1995, 2013).

Conclusion

Globalization in the Mekong and Red River Deltas was a process, not an event. The result was the creation of global cultures in each region that reflected interactions with cultures in South Asia, East Asia, and elsewhere in Southeast Asia, with the pre-existing indigenous cultures. A comparison of the two regions highlights the different ways in which foreign and neighbouring communities influenced each region and the historical trajectories of these early states. First, the frequencies of connections (see Knappett this volume) and the geographic proximity between the Mekong and Red River Deltas and their external influences were quite different, thereby producing different magnitudes of interaction (see Allard this volume). Contact between South Asia and the Mekong Delta necessitated traversing a large body of water and was likely punctuated, based on the shifting of the monsoon winds. Conversely, communities in the Red River Delta were more directly connected to their neighbours through waterways, seeing contact with regions of emerging China intensifying as the Han Empire moved into the Red River Delta.

The different intentions or content (see Knappett this volume) of the influences in each region is also significant for assessing the impact (see Allard this volume) of cultural change in the Mekong and Red River Deltas. The effects of an emerging network of contact and exchange are clear for communities of the Red River Delta during the second and first millennia BCE, with various regional cultures participating in a mutually impactful system. The later, historic Sinitic influence in northern Vietnam was decidedly imperial. However, the indigenous globalized culture became subsumed, but not forgotten, under Sinitic political control at the start of the Common Era. Rather than seeing the Han annexation of this area as simply the inception of an era of foreign domination, we propose that the area's participation within a widening global network was likely accelerated and expanded as a result. Conversely, the Indian influence in the Mekong Delta was primarily commercial and ideological in nature. In Cambodia, this lack of a colonial influence facilitated the evolution of local socio-political forces that eventually resulted in the establishment of the Angkorian Empire in the early ninth century CE (Stark 2006b).

However, in each location we argue that the ongoing development of global culture was largely accelerated by emerging elites in each region, who used these global cultures as part of broader socio-political strategies that resulted in the creation of states in the Mekong and Red River Deltas. In the Mekong Delta, elites with access to land, goods, and labour could donate these resources to the newly formed Hindu deities. In return they acquired both spiritual capital and advertised their control over these resources. Furthermore, in affiliating themselves with a Hindu deity over a local ancestor spirit, these elites were expanding their connections outside of the immediate area and into the international Sanskrit cosmopolis (Pollock 2006).

In the Red River Delta, third and second century BCE local political leaders were aware of Sinitic symbols of power and authority, and the material record of the Co Loa settlement reflects local forms of emulation and political manipulation. In this manner, political elites of the Co Loa Polity contributed to the continued emergence of global culture in the region by promulgating foreign cultural elements in local practices. While 'globalizing' objectives may not have been part of their political agendas, their participation in such leadership strategies resulted in the promotion of globalizing tendencies. Consequently, socio-political complexity was intimately linked to formative global cultures.

At the same time we acknowledge that non-elites played an important role in the legitimization and perpetuation of global cultures. Pre-Angkorian inscriptions note the donation of individuals and their labour to temples, emphasizing the importance of non-elites in the functions of temples and the temple economy, although their participation may not have always been willing (Vickery 1998). The widespread use of *kendi* vessels and their local production also point towards the participation of non-elite members of the population in rituals associated with the newly emerging global culture. Imported objects, like glass and agate and carnelian beads were widely exchanged, perhaps through both down-the-line networks and more direct elite-controlled exchange. However, it is not clear if recipient communities understood the meaning of these objects as representations of contacts with South Asia (see Allard this volume).The syncretism between Indian deities and local ancestor spirits, a practice still seen today (e.g. Warrack 2011), allowed non-elites to continue their indigenous spiritual beliefs while also legitimizing the global culture. In this way, the new global culture of the Mekong Delta expanded beyond elite spheres and into the broader population, facilitating the 'accelerating entanglements' (Jennings this volume) of South Asian goods and ideas with pre-existing local cultures

As reflected by the archaeological records of Yunnan, Lingnan, and Bac Bo throughout the Late Neolithic and Metal Ages, communities were in contact with one another in ways that resulted in the movement of ideas, goods, and people. Though some of these linkages may have been tied to elites, the proximity and conduits of travel and access almost certainly meant that various segments of communities were interacting, regardless of social status. Thus, elites likely did not control all points of access or aspects of the emergence and penetration of global culture (Francis Allard, personal communication 2015).

In the end, while globalization has been conventionally discussed within historically recent or modern contexts, systems of interaction and exchange did not materialize overnight. Although we currently lack the fine-grained resolution necessary to fully evaluate the specific criteria outlined in Jennings' model of globalization framework, the archaeological records of societies in Southeast Asia amply demonstrate the patterns of globalization in prehistoric and protohistoric contexts. Further research will undoubtedly sharpen our focus in that regard. The scale of such systems may be different, in terms of transportation infrastructures, volume of exchange, and various agents and groups, but the presence of exchange systems and their consequences were significant. Moreover, as we can see in Southeast Asia, a clear link exists between economic, political, and ideological motivations underlying interaction patterns, thus reflecting an important relationship between what might be considered elite culture and global culture. Indeed, as we have demonstrated, elite strategies related to power and status were an important engine of cultural change and emerging global cultures in the region.

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8.4

Tracing maritime connections between Island Southeast Asia and the Indian Ocean world

Tom Hoogervorst

Introduction

Southeast Asia's historical connections with the Indian Ocean provide a case study *par excellence* of 'early globalization', 'archaic globalization', or simply 'globalization' (cf. Abu-Lughod 1991; Hobson 2004; throughout this chapter, I use Island Southeast Asia and Maritime Southeast Asia interchangeably. I do not focus here on the mainland Southeast Asian sub-region; Figure 8.4.1). The region's incorporation into global exchange networks largely predates the rise of Western Europe as a world power, and has, as such, inspired those taking issue with Eurocentric tropes on globalization (cf. Frank 1998; Liebermann 2009; Chew 2014). Maritime Southeast Asian globalization is an a posteriori concept; the region's past, as this chapter demonstrates, was shaped by indigenous networks of exchange that eventually toppled over into trans-Asiatic and ultimately global spheres of interaction. These networks were global in the sense that they were not just macroscalar, but also brought about far-reaching cultural changes (Feinman this volume; Jennings this volume). Globalization as defined here need not necessarily be world-encompassing (Wallerstein 1974; Pitts and Versluys 2015; Knappett this volume).

The role(s) and position(s) of Southeast Asia's indigenous populations within these Indian Ocean networks often remains a point of discussion. For those who prioritize written accounts, much of the region's past cannot be seen other than through the lens of outsiders, be they European, Indian, Chinese or Middle-Eastern. This asymmetrical bias finds ample archaeological confirmation. Imported ceramics, metal tools, glass, beads, and other manufactured items are highly visible, whereas Southeast Asian products, tools and buildings – typically manufactured from wood, rattan, bamboo and other perishable materials – rarely show up in equal measure (Bronson and Wisseman 1978; Hall 2011). This imbalance notwithstanding, the logic of trans-regional networks requires the presence of mutually beneficial patterns of exchange. This is where globalization theory is able to provide the explanatory tools necessary to move away from tropes of core–periphery hierarchies, Indocentrism, and acculturation that have plagued Indian Ocean Studies from colonial times onwards. To some extent, focusing on Southeast Asian agency in early globalizing networks provides a counterweight to research on the introduction into Southeast Asia of world religions (Murphy and Lefferts this volume), Indianized writing traditions, the emergence of monumental architecture, and other manifestations of centralized power (Carter and Kim this volume).

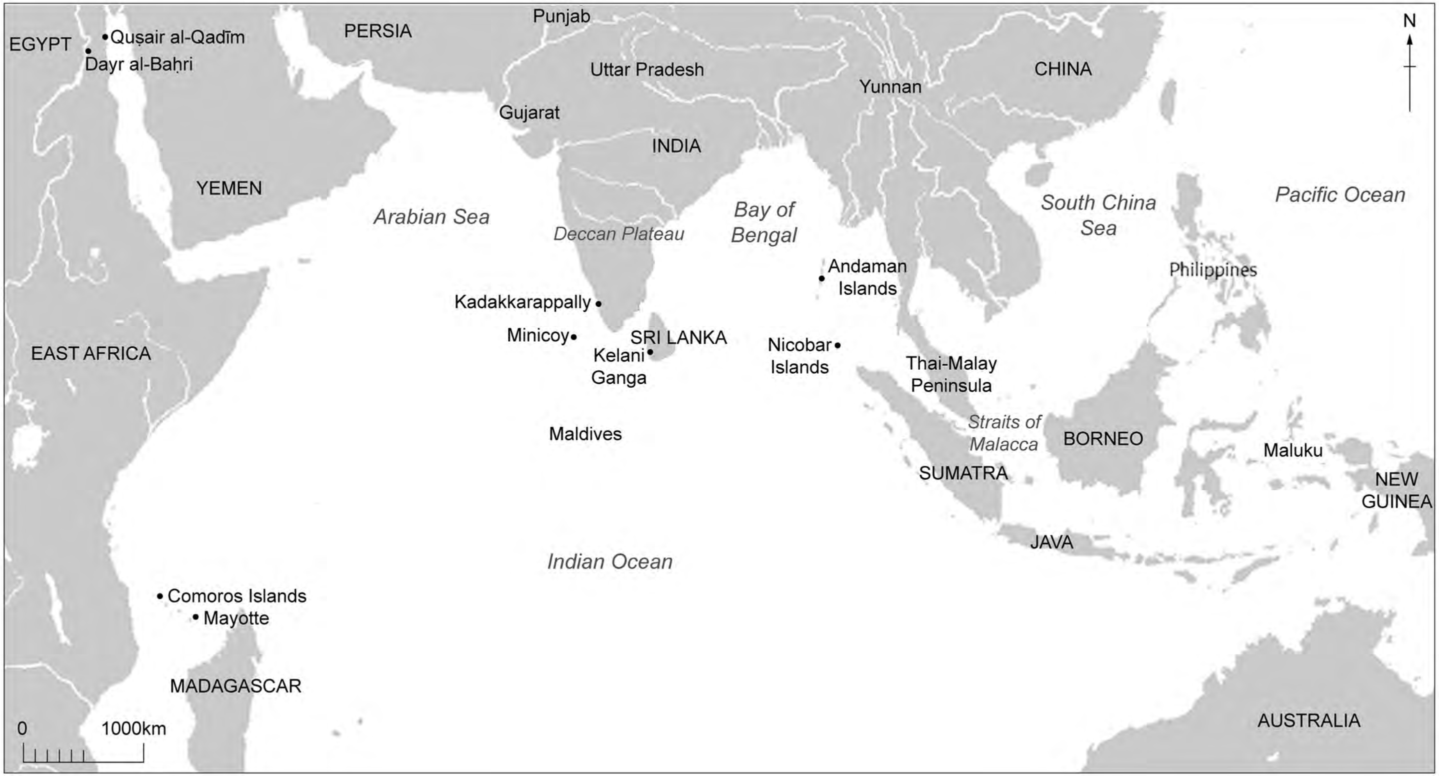

Figure 8.4.1 Map of the region with sites mentioned in the text

The inclusion of Island Southeast Asians among the world's earliest globalizing forces would have been significantly less self-evident if not for the fact that the population of Madagascar, off the coast of East Africa, speaks a language with indisputable origins from the island of Borneo (Dahl 1951; Adelaar 2009). This linguistic observation has sat somewhat uncomfortably with non-linguists, yet recent studies in human genetics on Malagasy populations have revealed Island Southeast Asian ancestry in both paternal and maternal lineages (Hurles *et al.* 2005; Tofanelli *et al.* 2009), whereas preliminary research on the nearby Comoros Islands points to a relatively small Island Southeast Asian contribution to the maternal ancestry of its predominantly East African and Middle Eastern-derived population (Gourjon *et al.* 2011; Msaidie *et al.* 2011). Together with a mounting body of archaeological, archaeobotanical and zoological data (see Boivin *et al.* 2013 for an overview), these additional lines of evidence compel scholars no longer to treat the Madagascar link as a quaint footnote with little impact on the overall narrative of global history. Its colonization seems to be a natural consequence of Southeast Asia's intertwinement with the Indian Ocean world, which went hand-in-hand with the deliberate introduction to that island of rice agriculture, iron metallurgy and textile production (e.g. Manguin 2010; Beaujard 2011).

As alluded to previously, the archaeological record can be misleading with regard to Maritime Southeast Asian influence in the ancient Indian Ocean. In all likelihood, tin from the rich deposits of the Thai–Malay Peninsula reached the Indian subcontinent in the first centuries CE, but was melted down and used for locally produced bronze bowls (Srinivasan and Glover 1997; Rajan 2011). Ceramic evidence is equally problematic. While certain Indian Ocean pottery types have been tentatively connected to Southeast Asian traditions (Solheim and Deraniyagala 1972; Allibert 2008; Selvakumar 2011; Miksic and Goh this volume), more systematic work needs to be done in this area. In a similar vein, Chinese-style ceramics – including Southeast Asian imitations (cf. Dupoizat and Harkantiningsih 2007) – are found much more ubiquitously across the Indian Ocean rim. If even a part of these ceramics was moved around by Island Southeast Asians concomitant to the colonization of Madagascar, their agency would be completely opaque archaeologically (Bing 2012; Chinese maritime activity in the Indian Ocean world was minimal until the ninth–tenth centuries CE: Manguin 2012; Liebner 2014).

The present study traces and reviews the connections between Maritime Southeast Asia and the Indian Ocean world through three related themes. The first section focuses on the impact of globalizing forces on the relationships between state-like settlements in Island Southeast Asia, their hinterlands, and the wider world. These intensified connections boosted – both financially and technologically – the region's already vibrant shipping traditions, as is argued in the second section. This in turn led to the large-scale infusion of Island Southeast Asian produce into global economic systems, transforming the medico-religious and culinary practices of Afro-Eurasia.

Local beginnings, global implications

The formation of complex, state-level societies in Island Southeast Asia is closely intertwined with the region's entanglement with the wider world. More specifically, the adoption of cultural and socio-political ideas typically took place in the wake of long-established commercial links. A factor not to be overlooked here is the character of Island Southeast Asian societies prior to intensified contact with the Indian Ocean world. With some notable exceptions, ancient Maritime Southeast Asia initially lacked grasslands-based livestock systems, cereal cultivation, and the associated opportunities for permanent settlement and high population density; this marks a contrast with the Southeast Asian mainland, whose earliest states were distinctly based on cereal cultivation (Stark 2006). Populations inhabiting the infertile coasts often depended on riverine exchange networks with slash-and-burn farmers, presumably from Neolithic times onwards (Bulbeck 2004). Around 500 BCE, these exchange networks started to feature ceramics, metal artefacts, and presumably agricultural tools and techniques, which often travelled from the Southeast Asian mainland all the way to eastern Indonesia (Bellwood 1997).

The first unambiguous textual references to Southeast Asia are from India: the Buddhist *Mahānidessa* and the *Jātaka*s dated to the late third–first centuries BCE (Wheatley 1961; Cœdès 1968). Regular commercial relations across the Bay of Bengal were presumably spurred by India's interest in Southeast Asia's gold deposits, especially after access to their Siberian supplies was cut off (Wheatley 1983; Hall 1993). Facilitated by favourable monsoonal winds, these maritime connections eventually incorporated Southeast Asia into the rich economic zone of the Indian Ocean. Indian influence initially manifested itself on the Southeast Asian mainland, where ceramics, beads and food items from the subcontinent start to show up archaeologically around 500 BCE (Glover 1996; Bellina 2007; Carter and Kim this volume). Several Graeco-Roman authors also mention Southeast Asia and its products, although their descriptions give the impression of being second-hand accounts rather than the results of intimate knowledge. Rome's eastwards expansion caused a considerable boost in Indian Ocean trade (Hall 1993; Manguin 2004), yet there is no unambiguous evidence for direct contact with Southeast Asia. Developments in East Asia also left their mark. From the second half of the fourth century CE, China increasingly focused its orientation to maritime trade, effectively shifting the centre of power towards Maritime Southeast Asia and away from the mainland (Hall 1993). The sizable trade between West Asia and China, with aromatics being exported eastwards and silk moving in the opposite direction, significantly strengthened the position of Island Southeast Asia on the global stage (Wheatley 1961; Wolters 1967).

Straddling the Straits of Malacca, a Sumatran polity known as Sriwijaya (*Śrīvijaya*) developed into an inter-regional nexus from the seventh century CE (Manguin 2004). It was the largest Southeast Asian emporium thus far, documented in Chinese accounts as a harbour from which camphor and other aromatic products were exported and where Buddhist pilgrims changed ships on their way to India (Wolters 1967). Sriwijaya infused unparalleled quantities of spices (see below), gold, tin, precious stones, ivory, rhinoceros horns, exotic birds, rainforest products, commodities from the sea, and slaves into trans-Asiatic trade networks. This range of poorly accessible resources reached the ports of Sriwijaya through the hands of semi-sedentary foragers with specialized expertise to obtain them. The relations of these groups with Sriwijaya and later polities were constantly renegotiated and often leveraged between mutual dependence and political subordination, reflecting a wider pattern throughout Southeast Asian history (cf. Andaya 2008; Dove 2011; Hoogervorst and Boivin in press). Sama-Bajau communities, for example, were often forcefully subjugated by land-based agents to better control their activities and revenues from maritime resources (Hoogervorst 2012). Along similar lines, the migration of the Malagasy community from southern Borneo to Madagascar presumably took place under Malay overlordship (Adelaar 2009). Rainforest-dwelling suppliers of rattans, beeswax and aromatic tree products, for example, typically relied on coastal settlers for an assurance of reliable markets and access to rice, salt and manufactured goods (Andaya 2008). This in turn created a niche for mercantile go-betweens, brokers and middlemen, who shaped alliances with local elites through intermarriage, a shared religion and commercial links (Andaya 2008; Hall 2011; see Beaujard 2005 on the same phenomenon in East Africa). Negotiation and enticement through the bestowal of titles, marital bonds and gifts became well-attested strategies to seek the loyalty of local forest- or sea-dwelling communities, who could ensure economic and occasionally military stability on behalf of their overlords (Bulbeck 2004; Andaya 2008; Hoogervorst 2012).

The economic integration of Maritime Southeast Asian settlements with the wider world brought about a convergence of political and religious systems, but also increased opportunities to actively engage in Indian Ocean trade. Greater financial resources and technological cross-fertilization created the conditions for the construction of larger watercraft across the Bay of Bengal and the South China Sea. The next section, hence, focuses on developments in Island Southeast Asia's shipbuilding traditions in the wake of its closer connections with other regions.

Technological exchange in the maritime sphere

Alongside writing, agriculture and industrialization, the adoption of ocean-faring techniques is one of the most significant globally replicated events. Southeast Asia's ship-building traditions transformed global transportation through the exchange of sailing and boat-building technologies. From its initial settlement, the region's inter-island trade networks and upland-coastal river systems gave rise to distinct water-based cultural orientations. By 40,000 BCE, the region's pre-Neolithic hunter-gatherers were able to cross the island chains and sea straits connecting Asia with New Guinea, Australia and Near Oceania (Gibbons and Clunie 1986; O'Connell *et al*. 2010). Glacial movements and fluctuations in sea levels forced their descendants to either develop maritime skills or move upland and avoid the sea. Findings of pelagic fish remains in a number of Pleistocene sites indicate a maritime orientation of some of the earliest inhabitants of Island Southeast Asia and Near Oceania (Lape *et al*. 2007; O'Connell *et al*. 2010). This is further supported by obsidian trade networks (Bellwood and Koon 1989; Tykot and Chia 1997) and anthropogenic translocations of marsupial species (White 2004).

The precise types of watercraft employed by these seafarers remain unknown. To get a better picture of more recent boat types, scholars have traditionally relied on a combination of iconographic evidence (e.g. depictions of watercraft on temple reliefs), textual evidence (e.g. philological material on boats or sea journeys), ethnographic evidence (e.g. studies of more contemporary boat-building and sailing techniques) and re-enactments of seafaring journeys (the latter include computer simulations based on sea currents and monsoon winds, e.g. Fitzpatrick and Callaghan 2008, but also actual sea journeys in replicas of Southeast Asian watercraft, such as Philip Beale's 2005 Borobudur Expedition). Recent advances in maritime archaeology, especially studies on shipwrecks, added a much-needed empirical dimension to the field of Southeast Asian seafaring (Manguin 2012; Liebner 2014; Niziolek and Respess this volume). Consequently, a number of generalizations can be made on the traditional watercraft of Maritime Southeast Asia. As with (other) Indian Ocean regions, plank-boats were typically sewn together edge-to-edge, rather than fastened through iron nails. A variant of this tradition prevalent in Maritime Southeast Asia is known as the lashed-lug design (Horridge 1982; Manguin 2012), characterized by threads passed through holes or lugs carved out of the planks (Figure 8.4.2). Another innovation observed in the waters of Southeast Asia and Near Oceania is the technique of plank-edging through internal dowel pins (cf. McGrail 2001; Manguin 2012), which is probably connected to the availability of iron tools necessary to drill holes into the edges of the planks. Western Indian Ocean watercraft typically exhibit continuous sewing (lacing) with threads showing on the outer side of the hull, whereas the Bay of Bengal features discontinuous sewing (stitching) with stitches kept inside the planks (Prins 1986).

Maritime Southeast Asian sails – traditionally made from rattan or palm leaves – are typically hoisted from unfixed sprit spars in order to be set lengthwise (fore-and-aft) or perpendicular to the keel, depending on the wind conditions (cf. Doran 1981; Hoogervorst 2013). The V-shaped 'Oceanic spritsail' or 'triangular spritsail', which is hoisted from two spars connected at the tack, is one of the most prominent examples of this rigging tradition. Another type known

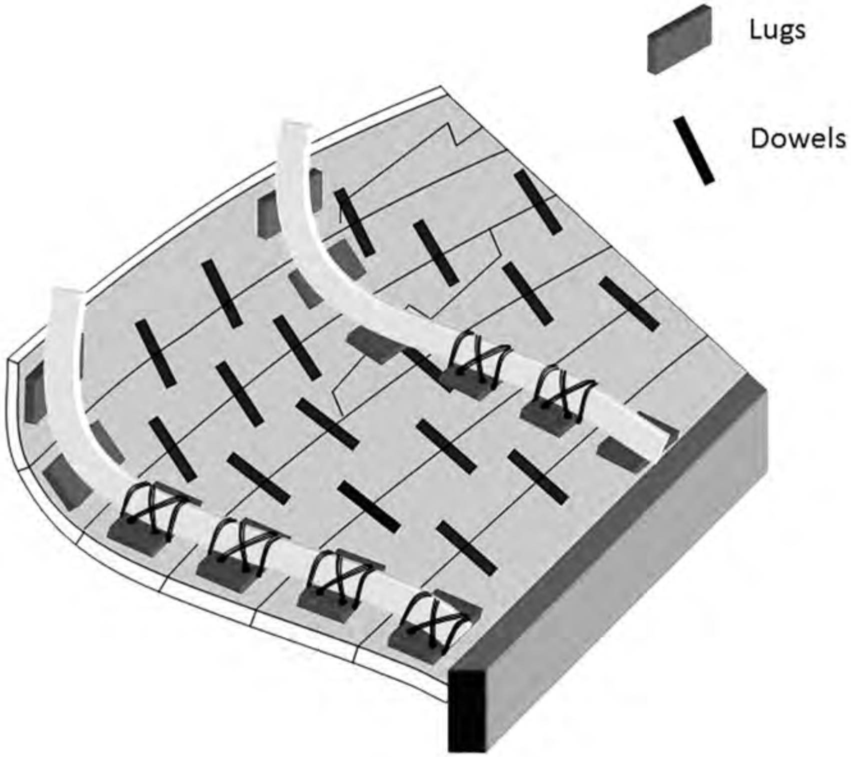

Figure 8.4.2 Plank-dowelled hull with lashed-lug design (courtesy of Horst Liebner)

as the 'Indian Ocean double spritsail' or 'bifid-mast spritsail' is supported by a V-aligned bifid mast (Figure 8.4.3). This type of rig is historically found in Sumatra, Sri Lanka, the Maldives, Madagascar and the coast of Yemen (cf. Haddon 1920; Bowen 1953; Doran 1981). The east coast of the Indian subcontinent appears to display a hybrid Southeast Asian–western Indian Ocean rigging tradition, characterized by trapezoid sails with booms and short masts stepped forward in the Maritime Southeast Asian tradition, but with a typically Middle Eastern short luff (cf. Bowen 1953; Pohl 2007).

Island Southeast Asian boats are further characterized by the outrigger device; a log connected by cross-beams to the main hull of the boat. Outriggers serve to improve the buoyancy and stability of dugout canoes and other types of small boats, especially when rigged with the relatively large sail types mentioned previously. They appear to have been absent on larger, more stable watercraft. Outriggers are also found throughout much of the wider Indian Ocean world (cf. Haddon 1920; Hornell 1920). In most parts of Island Southeast Asia – as well as the Comoros Islands and coastal East Africa – there is a predominance of double outrigger boats, whereas the sailors of South Asia, the Pacific, New Guinea and northern Australia generally prefer single outriggers. Both types have been documented in Madagascar, the Philippines, parts of Indonesia and north-west New Guinea (Hornell 1920; Hoogervorst 2013). The single outrigger canoe probably developed out of an asymmetric double canoe, whereas the double outrigger appears to have been a subsequent development (Brindley 1932; Doran 1981). In combination with larger boat types, the latter has clear benefits in terms of overall stability and increased cabin accommodation.

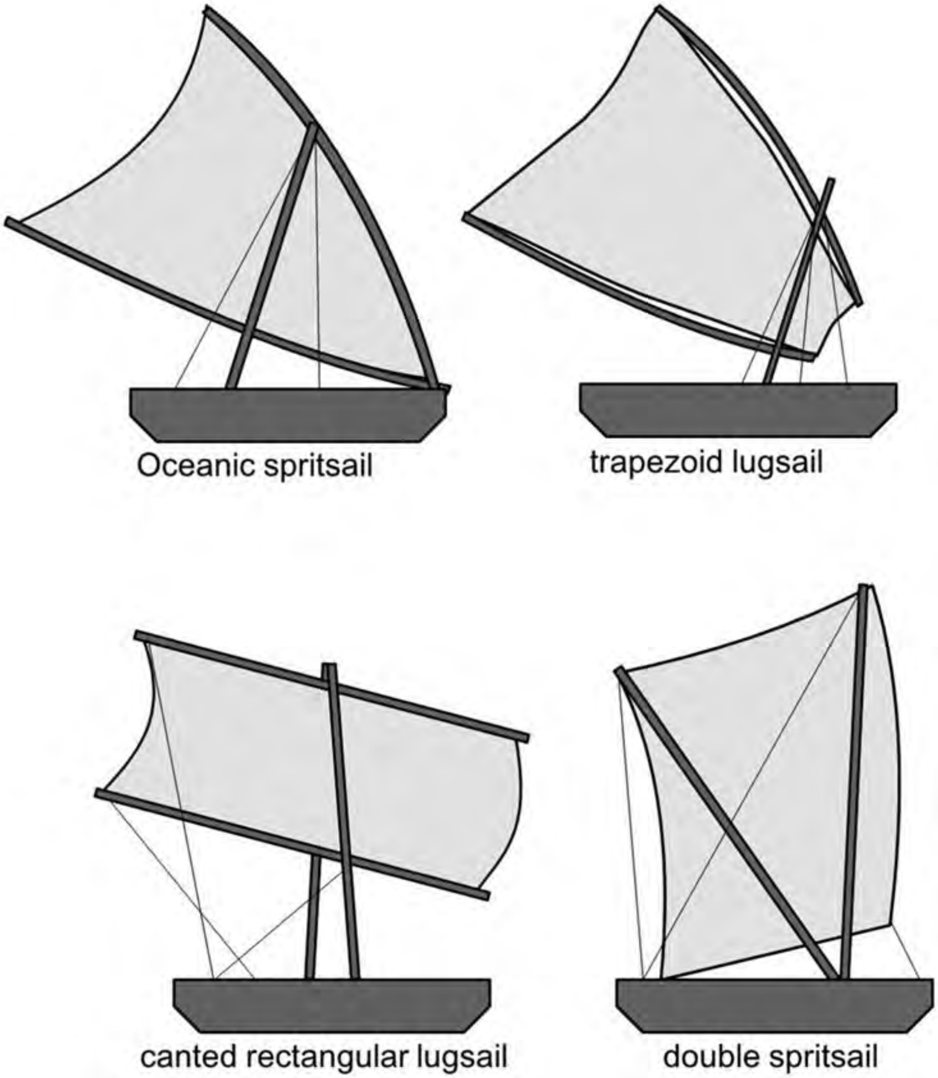

Figure 8.4.3 Southeast Asian sail types

Beyond these general characteristics, our record of pre-modern Southeast Asian sailing is mostly based on indirect evidence. From the second century CE, Chinese accounts document diplomatic missions from several Southeast Asian states, which sent ships containing slaves, large animals and exotic products to the Celestial Court (Pelliot 1904, 1925; Ferrand 1919; Wolters 1967). From the third century CE, they provide detailed descriptions of large, plank-sewn sailboats operated by foreigners, reminiscent of the ships depicted on the reliefs of the eighth–ninth centuries CE Borobudur temple in Central Java (McGrail 2001; Manguin 2012). Maritime trade across the South China Sea appears to have relied on Southeast Asian ships and sailors until the end of the first millennium CE, by which time China developed a home-grown ocean-faring tradition (Ferrand 1919; Pelliot 1925; Wolters 1967; Liebner 2014). In addition, Maritime

Southeast Asian sailors also shipped foreign cargoes, including the Persian cargoes referred to in fifth and sixth century Chinese sources (Wolters 1967: 139–58); the actual Persians did not regularly sail beyond Sri Lanka by that time. The famous Buddhist pilgrim Yìjìng also travelled from Sumatra to India on a local ship in the seventh century CE (Wolters 1967: 153).

The colonization of Madagascar from Borneo, presumably around the eighth century, may have been a secondary development to intensified contacts between Island Southeast Asia and East Africa (cf. Adelaar 2009). Slave-raiding, one of the foundation stones of Southeast Asia's earliest state-level economies, must have taken place on the East African coast too. An early ninth-century Chinese text documents the shipment of East African (*Zanjī*) slaves from Java to China (Pelliot 1904: 289–91). One such raid, apparently intended to the Chinese market, features in a tenth-century Persian account (Ferrand 1907: 462–63). The name given to these mercantile slave-raiders – in this and other medieval Islamic accounts – was *Wāqwāq*. This term, it seems, was used by the Arabs and Persians in reference to a semi-mythical people who dominated the southern Indian Ocean axis, beyond the reach of Middle Eastern sailors (Ferrand 1910). The presence of Maritime Southeast Asian merchants in the Indian Ocean – including Madagascar and the Maldives – was also documented in the earliest Portuguese sources (Ferrand 1910; Manguin 2010), but they appear to have been outcompeted by Gujarati, Chinese and European trading fleets by the end of the sixteenth century (Manguin 1993).

Upon initial European contact, some of the most widespread Indian Ocean ship types (and their names) – such as the *parau*, *junk*, *sambook*, *sampan* and *kappal* – were attested across a wide geographical range, suggesting a shared nautical tradition across the Bay of Bengal (Manguin 1993, 2012; Hoogervorst 2013). The adoption of fixed masts and cloth sails on Southeast Asian watercraft, especially on larger boats, may reflect external influence. Illustratively, a type of canted rectangular lugsail with boom has been documented from the Bay of Bengal (cf. Piétri 1949; Deloche 1994) to Maritime Southeast Asia and Near Oceania (cf. Haddon and Hornell 1936–38; Doran 1981; Lape *et al.* 2007). Further contact-induced innovations on Southeast Asian watercraft include the substitution of lateral steering oars by stern-mounted rudders and the adoption of novel anchor types, whose transmission may be relatively modern (Hoogervorst 2013: 97–99).

Maritime Southeast Asian seafaring technology also spread westwards. It has been pointed out that Southeast Asian types of edge-dowelled boats occur in the Maldives, Minicoy and Sri Lanka (Varadarajan 1994; Manguin 2012; Selvakumar 2011). The same plank-fastening method has been identified on an eleventh–twelfth century CE boat near Kadakkarappally, South India (Pedersen 2004; Tomalin *et al.* 2004). The outrigger device has been attested in the Pacific, New Guinea, northern Australia, the Andaman Islands, the Nicobar Islands, Sri Lanka, the South Asian mainland, the Maldives, the Comoros Islands, Madagascar and East Africa (Hornell 1944; Haddon and Hornell 1936-38; Doran 1981; Hoogervorst 2013), often in combination with Maritime Southeast Asian sail types mentioned above. An outrigger connective mechanism dated to 380 CE has been found on a dugout canoe excavated near the Kelani Ganga, Sri Lanka (Kapitän 2009: 168–89). The traditional dugout canoes of East Africa, characterized by double outriggers, plank lacing and the use of organic materials for caulking, presumably also reflect Southeast Asian influence. Most of the watercraft of coastal East Africa and the Comoros Islands display subsequent layers of Middle Eastern influence, such as the introduction of the lateen sail and the lashed stern-mounted rudder, whereas watercraft in Mayotte and Madagascar generally remain closer to the prototype (Hornell 1944 volume 2: 175).

A final comment must be made about the materials used in different Indian Ocean boat-building traditions. These include plantain fibre for caulking (Hornell 1943: 15–16), areca wood and plantain stems for different boat parts (McGrail 2001: 263), and areca nuts, plantains, and incense for boat initiation rituals (Kentley 2003: 135–36). All of these products are believed to originate from Southeast Asia. The next section, hence, will call attention to these and other biological translocations.

Biological exports: the backbone of trade

Amongst the most desired of Island Southeast Asian exports were a wide range of spices, including aromatic tree products. These pre-industrial luxury goods became a driving force of inter-ethnic commerce across the Indian Ocean and the lands along the Silk Roads. Southeast Asia's unique agricultural systems, too, became intertwined with those of the regions in regular contact. While not immediately apparent in the archaeological record, both spices and (other) food products considerably impacted on global trade, tastes and cultural practices surrounding food preparation and the medico-religious use of aromatics.

Southeast Asia's pre-globalized agriculture featured rice (see Fuller *et al.* this volume), yams, taro, bananas, sugar cane, coconuts, and sago. The possibility of a Southeast Asian domestication event of the chicken, water buffalo and pig remains uncertain (Larson and Fuller 2014). A number of Southeast Asian crops spread as far as Africa in pre-modern times, including yam varieties, taro, bananas and plantains, sugar cane, and the coconut palm (Murdock 1959; Mitchell 2005). In addition, recent mitochondrial DNA analysis reveals a Southeast Asian contribution in the gene pool of East African and Malagasy chicken populations (Razafindraibe *et al.* 2008; Mwacharo *et al.* 2011). These exchanges post-dated a series of African crop dispersals into South Asia and – to a lesser extent – South Asian domesticates travelling in the opposite direction (Fuller 2003; Blench 2003).

The dating of these biological transmissions is problematic. The world's earliest available evidence for banana cultivation is from a site in the Kuk Swamp in highland New Guinea, where microscopic silica bodies known as phytoliths indicate the presence of banana cultivars by 5000–4500 BCE (Denham *et al.* 2003). From a New Guinean homeland, edible bananas were dispersed into the Asian mainland and the Pacific (Langhe and de Maret 1999; Carreel *et al.* 2002; Denham and Donohue 2009). The earliest direct evidence of bananas in the African continent comes from a medieval context at the site of Quṣair al-Qadīm (van der Veen 2011: 98–100), where unusually arid conditions resulted in their desiccation and, hence, preservation. The discussion of earlier banana findings, on the other hand, is mainly based on the identification of phytoliths (Mbida *et al.* 2000; Lejju *et al.* 2006), arousing concerns about the stratigraphic integrity of the sites, the proposed chronologies, and the possibility of misidentification with taxonomically related endemic species (Vansina 2003; Mbida *et al.* 2005; Neumann and Hildebrand 2009).

Tentative clove remains at the Middle Bronze Age site of Terqa (present-day Syria) are equally controversial (Buccellati and Buccellati 1983), as are apparent mid-second millennium BCE nutmeg remains from Dayr al-Baḥrī in Egypt (Naville *et al.* 1913) and organic residues from early first millennium BCE chalices in Israel, possibly indicative of the presence of either jasmine or nutmeg (Namdar *et al.* 2010). In the absence thus far of corroborative data, both the identification and the time depth of these findings are to be considered with due caution. In general, spice remains are not easily found in the archaeological record. Reasons for this include their comparatively small proportions, unfavourable conditions of preservation, and a tendency to avoid spillage of these high-value goods (van der Veen 2011: 2). The earliest tentative remains of carbonized nutmeg are from an Iron Age site associated with 400–300 BCE Northern Black Polished Ware in eastern Uttar Pradesh (Saraswat *et al.* 1990: 122–23; Zumbroich 2012: 55–56) and from a fire altar dated to 50–250 CE in the Punjab region (Saraswat and Pokharia 1998;

Asouti and Fuller 2008: 117), though archaeological evidence for cloves and nutmeg in Indian regions in more direct contact with Southeast Asia remains to be established. Most of the available evidence for cloves and nutmegs – originally from the Maluku Islands – in use among the ancient Chinese, Indian and Middle Eastern populations is textual, although the precise dating of the relevant accounts is often problematic (Purseglove *et al.* 1981; Hoogervorst 2013). The same holds true for Maritime Southeast Asian pepper exports, such as the Java long pepper (*Piper retrofractum*) and the cubeb (*P. cubeba*) (Hoogervorst 2013: 71–72).

Equally important Southeast Asian exports were a variety of aromatic tree products. The wood of the sandalwood tree (*Santalum album*) is known worldwide for its cosmetic and aromatic properties. The geographical distribution of species of the genus *Santalum* shows remarkable discontinuity between southern India on the one hand and the entire area between eastern Indonesia, northern Australia and most of the Pacific region on the other, suggesting that its westward distribution was anthropogenic (Harbaugh and Baldwin 2007). However, scanning electron microscopy of charcoal remains indicates the presence of sandalwood in India's Deccan Plateau by the end of the second millennium BCE (Fuller 2007: 427; Asouti and Fuller 2008), apparently much too early for long-distance maritime exchange. Other commercially viable arboreal products – such as camphor (*Dryobalanops* spp., esp. *sumatrensis*), benzoin (*Styrax benzoin*), eaglewood (*Aquilaria malaccensis*) and sappan-wood (*Caesalpinia sappan*) – were never translocated from Southeast Asia to other regions, as they required specific local conditions to grow (Figure 8.4.4). The usage of most of these products is documented in Indian, Chinese, and Middle Eastern texts, but not archaeologically (Hoogervorst 2013: 72–76). Camphor, however, has been tentatively identified on an Egyptian mummy dated to 170 BCE (Cockburn et al. [1980] 1998: 77–78).

Another probable Southeast Asian export was the habit of betel-chewing, now found over a vast area across the Indo-Pacific. The betel mixture generally consists of three ingredients: the 'nut' of the areca palm (technically the endosperm), the leaf of the betel pepper, and slaked lime. Southeast Asian spices, such as cloves and nutmeg, are often added to the mixture (Zumbroich 2012). Our still-limited record of *Areca* phylogeography favours an Island Southeast Asian provenance of the palm, suggesting that it was introduced to the Indian subcontinent at a

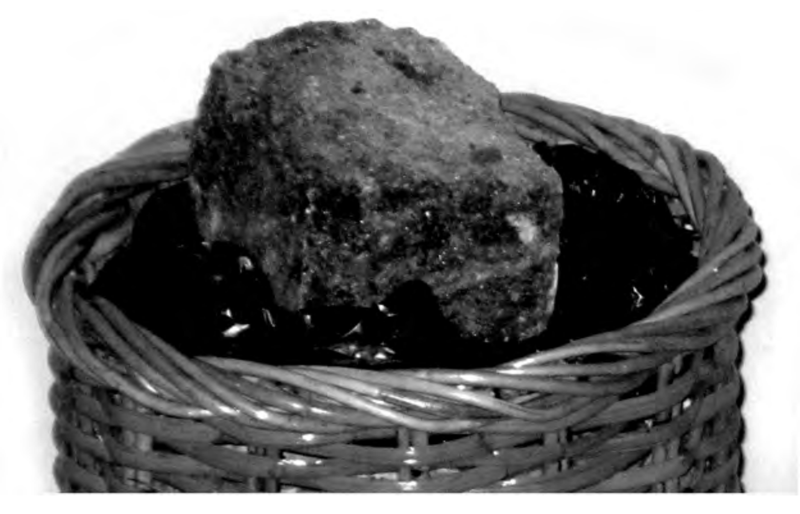

Figure 8.4.4 Benzoin, Sarawak State Museum, Kuching (photograph by author)

yet uncertain point in time (Fuller 2007: 427; Zumbroich 2007–08: 68–69). References to betel-chewing are made in the second century BCE *Jātaka*s, other Pali literature, and Jain scriptures (Penzer 1927: 254). The habit also spread to China as documented in texts from the first centuries CE (Penzer 1927: 303; Mahdi 1998: 405) and appears to have reached its peak of popularity during the Song Dynasty, which saw regular imports of dried nuts from several parts of Southeast Asia (Wheatley 1959: 68–69). Meanwhile, the first available archaeological evidence for betel nuts on the African continent is from the medieval Egyptian site of Quṣair al-Qadīm (van der Veen 2011: 59).

The coconut palm (*Cocos nucifera*) has long been believed to be a Southeast Asian introduction across the pre-modern Indo-Pacific. In the Sanskrit literature, coconut cultivation featured quite marginally until the first centuries CE (Kosambi 1965: 189; Mahdi 1998: 396), suggesting that it was introduced by peripheral populations of unknown ethno-linguistic affiliation. Recent genetic studies, however, indicate that the coconut subpopulations of the Pacific and the Indian Ocean are highly differentiated; admixture only occurs in East Africa (Lebrun *et al.* 1998; Gunn *et al.* 2011). This may point to two separate domestication events, one in Island Southeast Asia and one in the southern Indian subcontinent, as argued by Gunn *et al.* (2011).

For a number of plants originating from the nexus of mainland Southeast Asia, north-east India and Yunnan, it is difficult to assess whether their Afro-Eurasian dispersal took place over land or through maritime networks. Citrus fruits, which spread across the Indian Ocean world in pre-modern times, provide a case in point. Citrus taxonomy is complicated by the fact that citrus species hybridize relatively easy, obfuscating early dispersal patterns of lemon, citron and pomelo cultivars (cf. Gulsen and Roose 2001). The key lime (*Citrus aurantiifolia*) and kaffir lime (*C. hystrix*) presumably entered China and the Indian Ocean world from a Southeast Asian homeland (Hoogervorst 2013: 56–59). Along similar lines, the archaeobotanical record remains inconclusive as to early distribution patterns of ginger (*Zingiber officinale*), galangal (*Alpinia galanga*), aromatic ginger (*Kaempferia galangal*) and turmeric (*Curcuma longa*) (Rangisiruji *et al.* 2000; Asouti and Fuller 2008), leaving us primarily reliant on philology to speculate how these plants may have travelled in the past (Purseglove *et al.* 1981; Hoogervorst 2013).

Conclusions

This study has attempted to address the *how* and *why* of pre-modern globalization by foregrounding Maritime Southeast Asian agents in Afro-Eurasian networks. In the wake of long-established local exchange networks and mobile lifestyles, they generally developed a culture of openness towards outsiders, which proved decisive to their entanglement with the wider world. For many of the region's early state-level societies, external trade became the chief engine of growth. These long-distance connections relied in no small part on the distribution of commodities from remote hinterlands into global avenues and vice versa. Some of Maritime Southeast Asia's coastal polities came to control a wide array of high-value spices and aromatics, shipping technology and capital, granting them considerable advantages over their more inward-looking neighbours and enabling them to actively participate in – and dominate certain parts of – one of the world's main axes of global trade: the Indian Ocean. Their inclination to look beyond the areas nearby spurred costly ocean voyages, some as far as East Africa. The exchange of commercially valuable commodities was gradually followed by that of cultural and technological concepts from different peoples in contact. In doing so, Southeast Asia became truly 'global' in the sense that it became increasingly interconnected, interdependent and culturally homogenous with the Indian Ocean world.

When writing about Southeast Asia's past, it has become commonplace to acknowledge the volition and agency of indigenous populations in processes of globalization. Solid evidence of influence *from* Southeast Asia *to* other regions, however, remains spotty – particularly in pre-modern times. I have here called attention to Maritime Southeast Asian contributions to the ancient Indian Ocean world not just by looking at the relationships between humans and objects (cf. Hodder 2012; Gerritsen and Riello 2015), but also specifically between humans, languages, technologies and biological species. Material signatures can reflect cultural change and inter-ethnic contact, yet engaging with objects in pre-modern contexts entails the risk of decontextualization and material limitations, making it difficult to assess the representativeness of the objects under research. Although an additional focus on dispersals of species, technologies and loanwords does not completely solve this problem, a combination of datasets secures a diversity of perspectives and provides methodological inspiration to better understand the past of non-literary groups with poorly visible material assemblages. The real challenge, perhaps, is to keep up with developments across the diverse range of specializations from which we may expect new data to complete our picture in the near future.

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8.5

Globalizing Indian religions and Southeast Asian localisms

Incentives for the adoption of Buddhism and Brahmanism in first millennium CE Southeast Asia

Stephen A. Murphy and H. Leedom Lefferts

Introduction

Religious and economic systems originating in India and China have been instrumental in shaping and defining the local cultures of Southeast Asia. This was recognized by the earliest European explorers and resulted in the initial designation of the region as 'Indo-China' – midway between and culturally part of both of the larger and more popular metropoles to the north and west. However, deploying 'Indo-china' imposes a narrative on understanding the region: that Southeast Asia is not only mid-way geographically between these two larger locations, but also can be understood culturally through comprehending India or China and, therefore, was and is largely imitative of these larger entities.

Added to the impact of the derivative 'Indo-china', the nations of Southeast Asia, from the time of their colonization – partly as a riposte to the colonizers – have stressed their religious backgrounds as essential to their identities. Indeed, religion is not so much background as foreground in these nations' statements of themselves on the world stage. This recourse to religion to substantiate nationhood places unwarranted restrictions on the complexities behind the comprehension of their evolution.

The recourse to religion as a core statement of identity as well as our understandings of the 'objective' archaeological record both pose problems in identifying and describing the most reasonable narrative for making sense of the appearances of, especially Indian, religions over time in the lives of Southeast Asians. In contrast, the apparent 'colonization' and thousand-year occupation of what is now northern Vietnam by the Chinese seem to permit us to understand more easily the nature of the evolution of the contemporary Vietnamese culture and religion we see today (see Taylor 1983 and Jamieson 1993 regarding the Chinese colonization of Vietnam and its impact).

Theoretical 'orientations'

The above introduction raises the question of what is the more persuasive, reasonable narrative for the expansion of Indian religions into Southeast Asia. As cogently pointed out by Knappett (this volume), a theory that dynamically incorporates space and time, geography and history, is required. Globalization in his eyes is a macro-scale phenomenon with factors such as the frequency, strength, and content of the connectivities acting as some of the most salient features. These factors provide useful indicators in our exploration of the nature of interactions between South and Southeast Asia. The archaeological record dated to the early- to mid-first millennium CE provides a complex inventory of contacts and the exchange of goods and ideas (Ray 2014) across what O.W. Wolters termed 'the single ocean', that is, the 'Indian' Ocean (Wolters 1999: 38). Monica Smith (1999) showed that neither Indian polities nor Southeast Asian chiefdoms needed material goods nor ideas from each other at the beginning of the Common Era. Materials from Southeast Asian forests and hinterlands which were later to become important to the Indian trade could be obtained on the subcontinent; additionally, Indian polities had yet to amass the economic, administrative, and religious coherence to become engaged in intercourse with a larger world to the east.

In other words, the differences between Southeast Asia and the Indian subcontinent had not become so great as to make the contacts – that must have been occurring, albeit by boats hugging shores – apparent in the archaeological record (see papers in Revire and Murphy 2014). There may have been a 'single ocean', but essentially undifferentiated units communicated locally around it.

Thus, a theory that explains the emergence of differentiation at the same time as it brings specific questions to bear on the direction, frequency, strength, and content of interactions (Knappett this volume) is required. Employing these concepts permits a sensitivity to lacunae in the archaeological record, as it helps to explain the peculiar kinds of interactions – incentives – that would have occurred that might not be reflected in the record but were essential parts of this cross-oceanic communication. Of these incentives, religion and trade played formative roles.

Globalization theory encourages this questioning, as it places issues of contact and exchange within a larger framework. Globalization does not necessarily mean 'the whole planet'; it 'describes the world-encompassing outcomes of human connectivity that . . . ha[ve] epitomized human societies for millennia' (Robertson this volume). Southeast Asia in its crucial geographical location in the Euro-African-Asian continental system and the encompassed 'single ocean' has been formative in channelling as well as providing opportunities for global trade. While Southeast Asia's peninsula and islands may appear to pose barriers to commerce, contrarily, its location, resources, and people provided attractive destinations and way stations. Southeast Asia has been termed a 'crossroads' (e.g. Neher 2000); by this is meant not only a place 'to cross over or around', but also a provider of significant 'outcomes of human connectivity' – localisms – in its own terms. Meanwhile, the emerging urban polities of Southeast Asia became ripe for the ideological and administrative developments provided by increasing contact with the complex and multivocal traditions of the subcontinent. Therefore, the use of the term 'glocalization' – signifying the creative employment by local inhabitants of ideas and aspects of material culture arriving 'globally' – may be appropriate (Pitts and Versluys 2015: 13–15).

Increasingly 'dense' contacts between India and Southeast Asia likewise brought about an increasingly dense bi-directional flow of material goods and religious ideas between the two regions, through the genesis of a 'deviation-amplification mutual-causal system' (Maruyama 1963).

Imports from the wide variety of South Asian religious systems became extremely important to the further exploitation of the goods necessary to perpetuate and expand this trade; the more trade expanded, the more intense the religious connections between the subcontinent and Southeast Asia. For instance, Ray (2014) points out the multivocal nature of the South–Southeast Asian connections, emphasizing trade as well as religion because the former is more visible in the archaeological landscape.

However, not all cultures of Southeast Asia were equally eager for the inroads of these new ideas. Varying responses to economic and religious stimuli took place. This phenomenon reflects the unevenness inherent in the process of globalization as highlighted by Jennings (this volume). Smith (1999: 19) for instance, posits a configuration based on distance from India: those systems closer to the North Indian heartland may have been exposed to stronger ties leading to closer affiliation, while those more distant may have employed Indian symbols to strengthen local sovereignty, and those most distant may have used these symbols to balance increasing pressure from China for closer affiliation.

The hypotheticals raised in Smith's formulation and the eight trends of globalization identified by Jennings (this volume) lead to necessary explorations into the dynamics of relationships between donor and receiver cultures that become evident in 'glocalisms'. Wolters (1999) and Ray (2014) show that influences from India were not hegemonic. Ray notes that India possessed a 'shared . . . literate tradition . . . that extended across not only South Asia but also the Indian Ocean . . . that included Brahmins[,] . . . Buddhist and Jain ascetics, as well as navigators and trading and crafts groups' (2014: 148). Wolters points to the opportunism of those who left the subcontinent and the doctrines and rituals they propounded. These influences met with opportunities and constraints in local emerging environments – in this context, Cambodia – of 'overlordship' conjoined with a local awareness of differential capacities for achievement, organized under the rubric, 'men of prowess'. The presence of Khmer inscriptions from the seventh century CE of language 'reflect[ing] Pāśupata doctrine' allows Wolters to propose the presence of these 'startling [Śaivite] ascetics, covered with ashes', in Khmer royal entourages. Their relative indifference to Indian brahmanical injunctions concerning Vedic sacrifices and travel across the oceans, coupled with beliefs 'that Śiva's grace prevailed over the law of *karma*', Wolters proposes, would have made a Khmer overlord 'Śiva's foremost worshipper' (Wolters 1999: 429–33). We shall further explore this example and its implications towards the end of this chapter.

Archaeology is uniquely disposed to explore the dynamics of 'glocalization', the vagaries of globalization in an environment of differential directionality and strength of contacts with varying frequency and multivocal content. Southeast Asian archaeology provides an excellent landscape on which to chart glocalization in its intricacies and convolutions.

Urbanism as a diagnostic tool

Emerging urbanization provides subtle archaeological indicators of the increasingly intensified contact between India and Southeast Asia in the mid-first millennium CE. Polities emerged around moated settlements and/or walled cities. Southeast Asian elites sought new and sophisticated ways to legitimate their rule, addressed by the arrival of Buddhist and Brahman religious adepts propelled by the quest for resources and the administrative coherence of Indian polities. This exchange gave these new arrivals opportunities to receive patronage from local elites in return for their support. Buddhist and Brahmanic ritual frameworks delivered mutually reinforcing support to raise local rulers to semi-divine status. Brahmanism provided Śaivite beliefs and the construction of temple complexes to present and re-present microcosms of the heavenly realms, allowing rulers to claim they ruled by divine fiat. Buddhist concepts such as the *bodhisattva* (Buddha-to-be), the *cakravartin* (universal Buddhist monarch), and the *dhammaraja* (the king who rules in accordance with Buddhist principles) provided vehicles for the kingly amassing of merit and power (Hanks 1962).

The carriers of these religions brought written Pali and Sanskrit languages and more centralized ethical and moral codes. Sheldon Pollock (2006) demonstrated that, by the first millennium CE, Sanskrit had been transformed from a purely sacred to a more broadly based language, particularly concerning royal and political matters. It provided expression not only for ritual and religion, but also for the praise of royalty and political authority. Southeast Asians quickly adopted this literate cosmopolitan culture and the new political visions it encouraged (Pollock 2006: 123–25, Ray 2014).

Simultaneously, new programmes of architecture, urban planning, and monumental religious sculpture in stone and bronze arrived. A new vocabulary of religious symbolism and architecture overlay more local symbols, allowing elites to promote their rule through merit-making and sponsorship of large-scale religious building programmes, including *stupas*, monastery complexes, and religious imagery (cf. Wyatt 2001 regarding a slightly later time).

Ethically these religions provided rulers with a sense of moral and theological supremacy over neighbouring polities – as Wolters (1999) elaborated, by creating Hindu worlds on the Southeast Asian landscape – while providing the masses with new mechanisms for aligning with kingship and salvation. Altogether, these elements led to significant cultural change. In many ways, these incoming religions acted as catalysts for the emergence of the region's early states.

'Indianization' and 'indigenization'

Over the past four to five decades, the views of scholars such as Georges Coedès (1968) and Ramesh Majumdar (1955) concerning successive waves of Indian colonization and the 'civilizing' of local inhabitants have become discredited; recent archaeological interpretations point to the selective export of Indian concepts and discriminating adaptations by Southeast Asians (see Mabbatt 1977, Smith 1999, Wolters 1999, Stark 2006). Bentley (2005: 4–5) talks of globalization in terms of large-scale historical processes, stating that close attention must be paid as to how local human actors sought ways to take advantage of opportunities presented by such a phenomenon.

From the early 1950s, scholarship shifted toward seeing members of Southeast Asian societies as active agents; local elites consciously sought out Indian concepts for their own ideological and political ends. Paul Mus (1975), Jacob van Leur (1955) and others (e.g. Bekker 1951; Chandler and Mabbett 1975; Mabbett 1977) were prominent voices in this shift. This change was linked to the evolving post-colonial Southeast Asian political landscape, roughly coinciding with the independence of the French, British, and Dutch colonies. Victor Lieberman (2003: 1–20) observed corresponding trends regarding scholarship in Southeast Asian history, suggesting a similar process took place throughout the social sciences.

Since this reconceptualization, scholars have argued that the process by which Indian concepts, beliefs, and ideas were amalgamated into Southeast Asia was inextricably linked to urbanization, maritime trade, and the development of complex society (Bellina and Glover 2004: 68–83). As societies evolved throughout the region's prehistory, settlements became larger, administration more coherent, and trade networks more extensive, resulting in significantly increased contact and connections with India and China. Consequently, exposure to new ideas, concepts, technologies, and arts resulted. Globalization and the dynamics of local cultures, not colonization, were the driving factors.

In order to substantiate this model, archaeologists had to find evidence for sufficiently advanced societies (namely metal-age cultures, preferably a well-developed Iron Age) in the region. This need, as well as attempts to illustrate wide-scale trade networks with India and China, has driven much archaeological research in the region from the 1960s onwards (see for example Bellina and Glover 2004; Higham 1989, 2002, Higham and Thosarat 2012; Revire and Murphy 2014).

The shift from seeing Indianization occurring due to the impetus of Indians towards that of placing the initiative in the hands of Southeast Asians was referred to as ‘indigenization’ or ‘localization’ and was summed up by David Chandler and Ian Mabbett as follows:

> It is easy . . . to find evidence that indigenous practices in all spheres of life persisted largely uninfluenced, and that the apparently Indian forms were really local ones in disguise – local gods with Indian names, local architectural motifs or local legends with Indian top dressing.
> *(1975: viii)*

Gosline (2006) defined the process of indigenization as one aspect of socialization. A similar process took place within India itself. Over time, local cults and deities became appropriated by both Brahmanism and Buddhism (see Guy 2014: cat. nos 14–16; Padma 2013). Pollock (2006: 530–32) noted that the process of Sanskritization in India was contemporaneous with that taking place in Southeast Asia. The ability of these religions to fuse with local deities and practices goes some way to explaining how they could successfully replicate this process in a Southeast Asian context.

Concurrently, Indianization was not a uniform phenomenon (Smith 1999). Globalizing influences were felt to differing degrees in different locations over the *longue durée* (Braudel 1976). Furthermore, an all-encompassing homogenous Indian culture never existed. Indian societies had, and still have, extensive regional variations in terms of languages, cultures, histories, religions, and traditions. Influences came to Southeast Asia from various Indian hearths throughout the first millennium. While we can propose some fixed points of reference such as the Guptas in northern India, the Pallavas in southern India, and, from the eighth century onwards, the Pala in northern India and, in particular, the site of Nalanda, attempts to explain Southeast Asian change under a single overarching concept of Indianization belie its complexity.

The following discussion singles out four regions at particular times to highlight processes of selective adoption, socialization, and the overall impact of globalization on Southeast Asian cultures. The Pyu in Myanmar, Dvaravati in Thailand, the Thai–Malay peninsula, and pre-Angkorian Cambodia provide clear examples of the adoption of Buddhism and/or Brahmanism from the mid-first millennium CE onwards. Buddhism and Brahmanism, never mutually exclusive, set these societies on new trajectories, the effects of which remain in motion today.

State-sponsored Buddhism

Whether it be King Bimbisara’s donation of the first monastery at Veluvana during the lifetime of the Buddha or Emperor Asoka’s transformation two centuries later, the conversion of rulers to and their subsequent patronage of Buddhism has a distinguished history. Through such translations, rulers came to embody concepts such as the *dharmaraja* (the king who rules in accordance with the teachings of the Buddha), the *cakravartin* (universal Buddhist monarch), and the *bodhisattva* (the Buddha-to-be). As Buddhism arrived in Southeast Asia, local rulers found a religion that would not only serve their spiritual needs, but also, and more importantly, greatly facilitate their political aspirations. Over approximately two centuries, forms of state-sponsored Buddhism arose with local rulers and elites monopolizing their patronage and support of the religion, expressed through the production of religious art and architecture. Some of the earliest evidence for the adoption

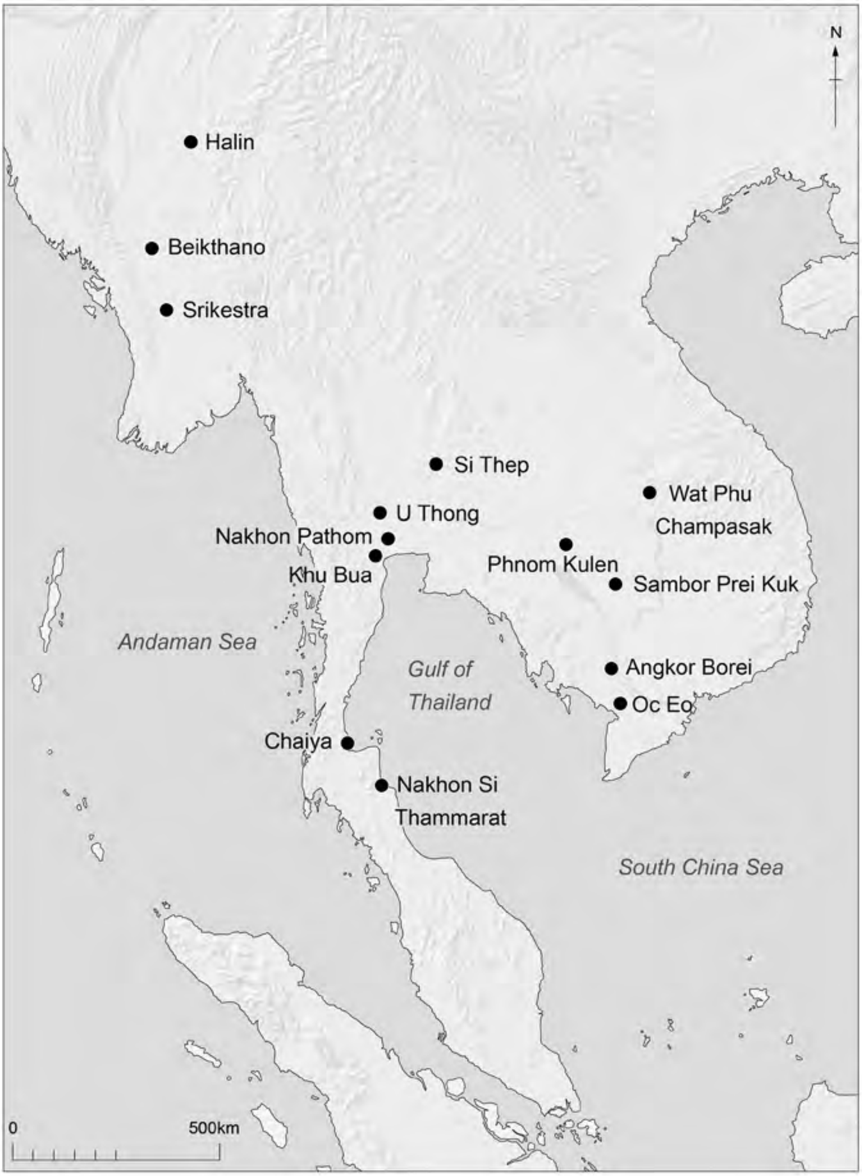

Figure 8.5.1 Map of Southeast Asia showing the main sites discussed in the text (© Stephen A. Murphy)

of state-sponsored Buddhism in Southeast Asia comes from Pyu culture in today's Myanmar and Dvaravati culture in central Thailand. Both developed forms of state Buddhism that are indicative of how the religion shaped, and was in turn reshaped, by the cultures it encountered.

The Pyu are the earliest historic culture identified in central Myanmar. Chinese texts dating from as early as the fourth century CE name them; however, the British historian Gordon Luce preferred to call them 'Tircul', the term by which they referred to themselves (1985: 47). The Pyu were the forerunners of contemporary Burmans and the kingdom of Bagan.

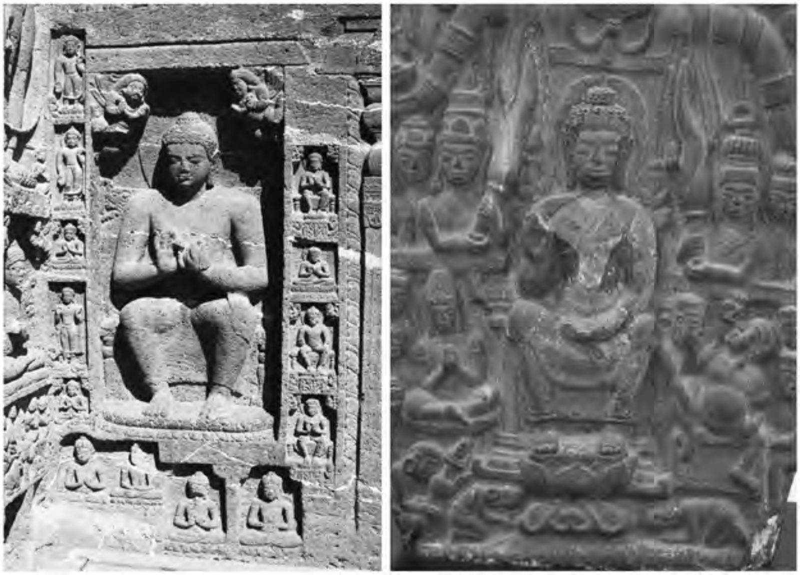

Figure 8.5.2 Buddha images. Left; *c.*fifth century CE high-relief, seated Buddha image in the Gupta style from the Ajanta caves, India; right: seventh–eighth century CE Buddhist stele from Nakhon Pathom showing the Buddha seated in *vitarka mudrā* (photographs by Stephen A. Murphy)

They were the dominant ethnic group in central Myanmar, while southern Myanmar as well as Dvaravati in central Thailand were the domains of the Mon (Diffloth 1984). Archaeological evidence for Pyu comes from three main sites: Halin, Srikestra, and Beikthano. One of the Pyu culture's distinguishing features was the adoption of Buddhism and the development of large-scale brick architecture and religious sculpture based around urban centres with sophisticated irrigation systems (Figure 8.5.1).

'Dvaravati' refers to the earliest proto-historic – historic culture that flourished in today's central and north-east Thailand from *c.*fifth–eleventh centuries CE (for a full discussion see Skilling 2003; Murphy 2010: 39–85, Murphy 2016; for north-east Thailand see Murphy 2014). Its emergence has been inextricably linked in scholarship to the arrival and wholesale adoption of Buddhism by local elites. However, this viewpoint may need to be tempered somewhat as Revire (2016) has shown that they also sponsored Brahmanism to varying degrees. That said, Dvaravati produced some of the finest Buddhist sculpture of the period, adapting Indian modes of representation and infusing them with an indigenous aesthetic, embodying the essence of the Indian 'global' combined with the local (Figure 8.5.2).

Beikthano and Srikestra

The ancient settlement of Beikthano is located in the Yin valley of central Myanmar, north of the modern village of Kokkogwa, Taungdwingyi Township, Magwe Division. It is situated between a number of streams, all of which flow westward to the Ayeyarwady River, making the surrounding region ideal for rice cultivation (Moore 2007: 155). The site is roughly square and enclosed by walls of fired brick, surrounding an area amounting to 8.81 km^2

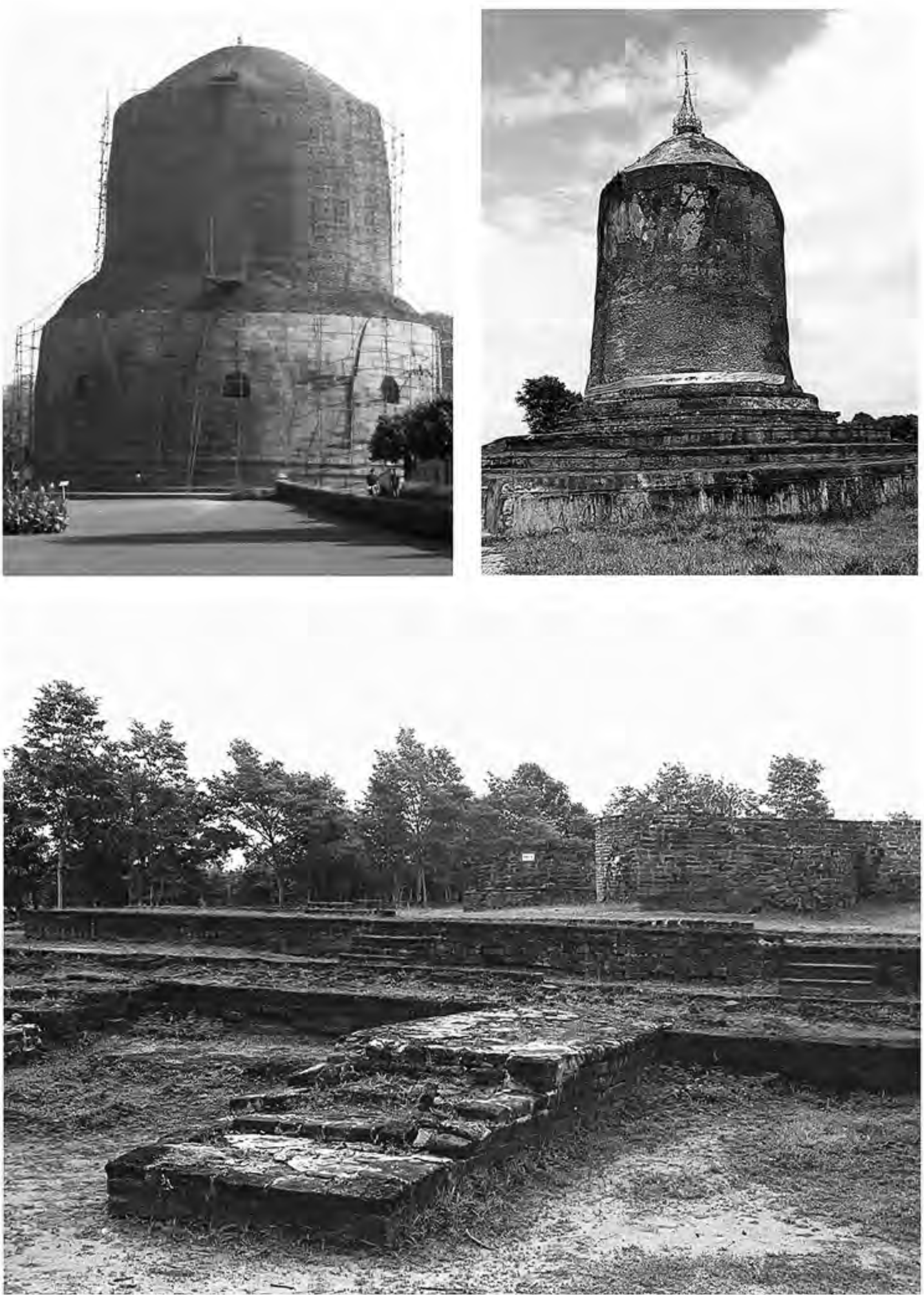

Figure 8.5.3 *Mahācetiya* or 'Great Stupas' in India and Myanmar: Clockwise from top left: the early sixth-century CE Damek stupa at Sarnath, India (photograph by Stephen A. Murphy); the sixth–seventh century Bawbawgyi stupa, Sriksetra, Myanmar (courtesy of Elizabeth Moore); extant remains of the fourth–fifth century Stupa KKG3 at Beikthano, Myanmar (courtesy of Elizabeth Moore)

(Stargardt 1990: 156). Numerous brick structures are located here, including a monastery complex (KKG2), a large stupa (KKG3), and a palace (KKG5) (Stargardt 1990: 157, 173–75). Unlike the site of Srikestra, no significant Buddhist sculptural tradition has been identified at Beikthano, raising the possibility that the Buddhism practiced here focused more on aniconic ritual such as stupa-worship. However, it may be that while Buddhist architecture developed early, stone or bronze sculptural workshops were established later. In 2003, excavations at site BTO-13 uncovered a small bronze Buddha image (H. 13 cm) dated stylistically to the fifth–sixth centuries (San Shwe 2013: 279–80, fig. 26.9). By comparison, this discovery and the numerous examples of Buddha images from the site of Sriksetra suggest that worship of Buddha images was part of the site's religious practice.

Some of the most substantial evidence for state-sponsored Buddhism at Beikthano is present in the architectural triad of monuments KKG2, KKG3, and KKG4. Janice Stargardt (1990: 190–204) shows that they represent a monastic complex of considerable scale located at the heart of the urban settlement. KKG2 is a rectangular, almost symmetrical building with an entrance chamber in the middle of the east façade. The building is divided into eight separate cells with an access corridor along the long axis on the eastern side (see isometric drawing in Stargardt 1990: 194). Aung-Thaw noted that this architectural design, whereby a group of small cells is placed off an adjoining corridor, closely follows that of Buddhist monasteries excavated in Nagarjunakonda in Southern India, specifically site 20 (Aung-Thaw 1968: 16; also see Sakar 1960: pl. XLVIII). Stargardt agrees that site 20 at Nagarjunakonda was the most probable prototype for KKG2.

Approximately 40 m east of KKG2 lies KKG3 and KKG4. KKG3 represents the remains of a stupa while KKG4 may be an associated shrine (Figure 8.5.3). KKG3 is a large cylindrical structure that survives today to a height of about 3 m and has a diameter of approximately 9 m (Stargardt 1990: 200–01). Four square projecting platforms (*ayaka*) adjoin KKG3 at the cardinal points; Brown notes this formation is characteristic of Andhra sites in Southern India such as Amaravati or Nagarjunakonda or perhaps sites in Sri Lanka (2001: 35). KKG3 and KKG4 are ringed by two large circular walls, giving the entire monument a diameter of 42 m. These walls create a corridor, which might have facilitated the circumambulation (*pradakshina*) ritual. Stargardt (1990: 204–05) argues that this monument was an attempt to create a *mahācetiya* or 'Great Stupa'. Stupa worship was an integral part of Buddhist religious practice from early in its history.

This structural triad is located in the heart of the Beikthano settlement (San Shwe 2013: 277). The scale of the structures' construction and their proximity to the palace (KKG5) suggests linkages between the two; it is likely the monastery complex was built under royal patronage. Only the ruling elite had the manpower and resources to undertake such a large-scale building programme. By visibly supporting Buddhism, this complex not only advertised the ruling elite's munificence and power through the control of labour and resources, but it also provided a stage upon which the elite could promote its spiritual superiority through rituals and offerings. Collaboratively, by supporting the upper echelons of society, monks found themselves owning a substantial monastery complex to promote their spiritual and secular ambitions.

At Sriksetra, similar processes took place. Located in the modern town of Pyay, Bago Division, Central Burma, 6 km west of the Ayeyarwady, it is the largest known Pyu settlement in Myanmar. Unlike Beikthano, its walls are circular with a circumference of approximately 14.6 km, enclosing about 30 km^2 (Moore 2007: 167). Five inscribed stone funerary urns provide seventh–eighth century CE dates; four bear the name of a single individual in Pyu with interlinear Brahmi (the Burmese scholar San Win proposed a somewhat earlier dating sequence spanning the fourth century CE, using dates based on the Gupta as opposed to the Burmese era, as Blagden did [Moore 2007: 173]. San Win's proposal is not accepted or rejected, re-emphasizing that further research into Sriksetra dating needs to be undertaken).

As with Beikthano, evidence for a large palace near the centre of the settlement has come to light; the Bawbaygyi stupa, standing 46 m tall, reflects the practice of constructing monumental Buddhist architecture (Figure 8.5.3). Architectural parallels in India can be seen in monuments such as the Demek stupa in Sarnath. As with stupa KKG3 at Beikthano, the Bawbaygyi's scale supports the argument that it functioned as a *mahācetiya*. However, unlike Beikthano, Sriksetra provides ample evidence for surviving Buddhist material culture.

Some of the clearest evidence for direct royal support of Buddhism at Sriksetra comes from a headless Buddha image and a reliquary (Guy 2014: cat nos 27 and 41). The Buddha image is seated cross-legged on a throne, hands in *dhyāni mudrā*, indicating meditation. Stylistically dated to the seventh century (Brown 2001: 37–38; Guy 1999: 21), a Pyu and Sanskrit inscription is directly below the Buddha's legs. This states that the image was donated by Prince Jayacandravarman, expressing his wish that adherence to the Buddha's teachings continue until the end of the world (Duroiselle 1930).

Further association of royal names and Buddhist iconography comes from a gilded silver reliquary found in 1926 at the Khin Ba mound (Moore 2007: 175). When Charles Duroiselle (1930: 171–81) inspected the mound, he discovered the remains of a brick stupa with an intact relic chamber covered by a large stone slab with a stupa carved in relief (see Luce 1985: pl. 27; Guy 2014: cat. no. 26). The silver reliquary casket was centred in the approximately 1 m^3 chamber. The casket, 66 cm high and approximately 37 cm in diameter, has high-relief Buddha images depicted on its four sides, each image flanked by smaller images of disciples. The names of the four Buddhas are inscribed in Pyu and Pali on the casket's upper rim while the names of disciples and donors are located on the bottom (Guy 1999: 19; Stargardt 2001). The donors' names, Śrī Prabhuvarman and Śrī Prabhudevi, are in Sanskrit. The suffix '-*varman*', adopted throughout Southeast Asia, denotes kingship of Southern Indian origin (Guy 1997: 93). Śrī Prabhudevi most likely refers to Śrī Prabhuvarman's Queen; '-*devi*' is the Sanskrit root for the divine female aspect. Guy raises the possibility that the use of '-*varman*' on both reliquary casket and headless Buddha image may reflect dynastic continuity between respective donors (1999: 21).

Dvaravati

As with early Pyu sites, Dvaravati culture adapted and adopted Buddhism from its beginnings. It emerged as the main political and cultural force in central Thailand from the sixth century; over the course of three to four centuries it produced some of the most sublime sculpture in Southeast Asia. Key sites such as Nakhon Pathom, U Thong, Si Thep, and Khu Bua developed into urban centers bequeathing significant architectural and sculptural remains.

The moated site of Nakhom Pathom provides an excellent example of the impact of Buddhism on Dvaravati culture. The presence of monumental Buddhist architecture and sculpture as well as inscriptional evidence from coinage provides some of the clearest evidence for state-sponsored Buddhism in the Dvaravati period. Nakhon Pathom is one of the period's largest and most highly developed urban centres, with an elite that embraced and incorporated religion into their social and urban fabric.

The ancient settlement covered an area of 3,700 by 2,000 m (740 ha). It is situated on the west bank of the Ta Chin River, about 60 km directly west of modern-day Bangkok. Two large stupas are at the settlement's centre. The first, Chula Pathon Chedi, was excavated in 1939 by the Fine Arts Department of Thailand and Pierre Dupont (1959, 2006), while the second, Phra Pathon Chedi, 400 m to the west, was recently excavated by the Fine Arts Department

(Nguanphienphak 2009: 145–49). Dupont's 1939 expedition also uncovered an additional stupa, Wat Phra Men, located approximately 1 km outside the moat to the south-west.

All three stupas were of fired brick with façades decorated with stucco ornaments and motifs. Chula Pathon Chedi was faced with terracotta plaques depicting Buddhist narratives (Krairiksh 1974). Four or five colossal stone Buddha images are reported to have come from Wat Phra Men; none were found *in situ* (Revire 2010: 82–84). These statues, over 3.5 m tall, are seated with legs pendant and the right hand in the teaching gesture (*vitarka mudrā*).

Nakhon Pathom evidences many similarities with Beikthano and Sriksetra: monumental Buddhist architecture and sculpture produced by royal sponsorship in an urban settlement. Chula Pathon Chedi and Phra Pathon Chedi were part of a large-scale monastic settlement located at the city's heart. The latter stupa most likely functioned as a *mahācetiya*. Their sizes and central location point to the possibility that they were part of a royal monastery. Wat Phra Men, located outside the settlement, may have been part of a smaller monastery. Despite this, it continued to receive considerable patronage. The Wat Phra Men stupa constitutes one piece of evidence for sponsorship. The four large Buddha statues, which supposedly sat at its cardinal points, perhaps forming a *mandala* (Revire 2010: 115), constitute another.

Additional evidence for the adoption of Indian forms of kingship at Nakhon Pathom comes from inscribed silver coins, stone tablets, and *dharmacakra* (wheels of the law). Coins, often with conch or *śrīvatsa* (abode of the goddess Sri) images on their obverse, are symbols of Indian kingship (Indrawooth 2004: 133). One coin is inscribed with the epitaph *śrīdvāravatīśvarapuṇya*, translated, 'meritorious deeds of the King of Dvaravati'. Stone tablets identified as ritual trays may have been used in the *abhiṣeka* royal consecration ceremony outlined in the Vedic text *Śatapatha Brāhmaṇa* (Indrawooth 2004: 136). This kingship ritual is depicted on a lintel from Wat Eng Khna in Cambodia in a Śaivite context (discussed below), illustrating that both central Thailand and Cambodia, whether professing Buddhism or Śaivism, adapted concepts and rituals from the same wellspring (see also Guy 2014: cat. no. 88).

The *dharmacakra*, 'Wheel of the Law', provides further evidence regarding concepts of Dvaravati kingship. These large stone wheels, having their origins in India, are some of the most distinctive artistic and religious symbols of Dvaravati culture. Each consists of three stone parts, the *cakra*, 'wheel', mounted on a *stambha*, 'pillar', with a square *socle* uniting them (Figure 8.5.4). A *cakra* measures between approximately 60 cm to 2 m in diameter while the *stambhas* can be 2 m tall; once assembled, a *dharmacakra* is an imposing monument.

The *dharmacakra*'s symbolism is multivalent. In India, *dharmacakra* are early aniconic forms of the Buddha, shown in reliefs at Amaravati (Huntington and Huntington 1985: 175). *Dharmacakra* also represent a specific episode in the Buddha's life, when he set his teachings (the *Dharma*) into motion by preaching at the Deer Park in Sarnath. The most significant political meaning is contained in the conflation of *dharmacakra* with *cakravartin* (universal emperor). This first appears in Mauryan India when *dharmacakra* appear as iconographic elements on Asokan pillars. This link is explicitly made in the *Dīgha Nikāya* (3.58 ff.) of the *Suttapiṭaka*, which states that just as the Buddha leads all to enlightenment, so the universal emperor conquers all and rules righteously.

Dvaravati *dharmacakra* simultaneously functioned as representations of the Buddha and his teaching and of the ruling monarch who presumably commissioned them. Brown records over 42 *dharmacakra* throughout central Thailand, numerous examples coming from Nakhon Pathom (Brown 1996: XXVI). Pinna Indorf (2014) suggests that each wheel represented a king or ruler and that they were essential to the *rājasūya* consecration ceremony. Thus *dharmacakra* were symbolic of the amalgamation of Buddhism and kingship and part of larger royal representational programmes. They have been found near stupas at a number of sites (such as U Thong stupa no. 22). In effect, the ruler asserted synonymy with a *bodhisattva* (Buddha-to-be). *Dharmacakra*

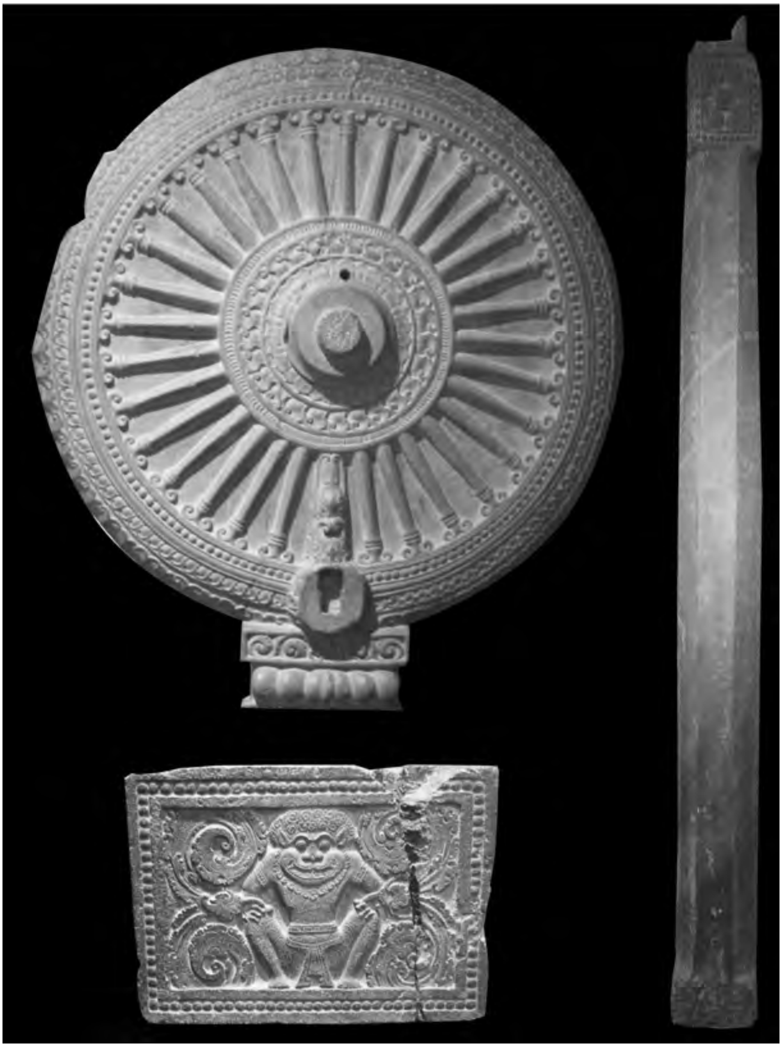

Figure 8.5.4 Three sections of a Dvaravati *dharmacakra*: clockwise from bottom left, the socle, the *cakra*, the *stambha* (these three objects are from separate *dharmacakra* and were not found as a set), (photograph by Stephen A. Murphy)

provide clear examples of an Indian symbol adopted and adapted to local royal ideology and performance practice.

Converting to and actively supporting Buddhism, rulers of Dvaravati and Pyu polities possessed a new symbolic and religious toolkit to promote and legitimate their rule. Sponsorship of monastery complexes and the production of Buddha images provided ample opportunities to illustrate munificence and power. Buddhist monks, in return for support of local rulers, became direct recipients of this patronage. *Dharmacakra* encapsulate this conflation of religion and politics. These monumental freestanding stone symbols, placed in front of stupas or monastery complexes, proclaimed both the temporal power of the ruler and the spiritual supremacy of Buddhism. Furthermore, by facilitating the construction of religious structures, the most prominent of which functioned as *mahācetiya* (great stupas), the upper echelons of Pyu and Dvaravati societies styled themselves benefactors *par excellence* of this new religion. They not only obtained considerable spiritual merit in the eyes of the faithful, but they also legitimated and strengthened their rule and place in the social order.

The arrival and adoption of Buddhism in Pyu and Dvaravati cultures highlights the mutual amplification processes of globalization. On the one hand, Buddhism's arrival transformed these societies into ones possessing monumental architecture, a developed sculptural tradition based on Indian models, new ethical and moral codes, and new modes of political expression. On the other hand, simultaneously, in monopolizing these incoming global religious currents, the rulers of these societies adapted these inspirations and rituals to their own socialization templates. Rulers seized these opportunities to strengthen their positions in the existing social order. This interpretation provides a counterpoint to Robertson's (this volume) assertion that globalization acts to destabilize the status quo and vested interests. In the Southeast Asian context, it had the opposite result.

Brahmanism

While Buddhism took hold across large parts of Myanmar and Thailand, in Cambodia a Brahman variant became ascendant. A local form of state Śaivism emerged in the kingdom of Zhenla, the precursor to the Angkorian Empire, located in northern Cambodia, southern north-east Thailand, and southern Laos. Another Brahman variant, Vaiṣṇavism, took root in the Thai–Malay peninsula and southern Cambodia from as early as the fifth century and became the religion of the early coastal polity of Funan located in the lower Mekong Delta based around the sites of Oc Eo (in modern-day Vietnam) and Angkor Borei (in modern-day Cambodia); this polity is known almost exclusively from Chinese sources. However, archaeological excavations over the past half-century have attempted to match textual descriptions with on-the-ground evidence (for Oc Eo see Malleret 1959–63 and Khoo 2003; for Angkor Borei see Stark 2003). The sculptural tradition that emerged in this region provides one of the best examples of how Indian modes of representation became localized over the course of two to three centuries. We shall turn to the Vaiṣṇavite material of Funan, followed by a discussion of state Śaivism in Zhenla, to illustrate that, as was the case with Buddhism in Myanmar and Thailand, Brahmanism transformed and was in turn transformed by the cultures it encountered.

A corpus of Viṣṇu and Harihara (a composite deity made up of a union between Viṣṇu and Śiva: see Guy 2014: cat. nos 91–92) images from peninsular Thailand and Cambodia spanning three to four centuries provides an evolving timeline of how the global became local. While these statues' initial presence may be best explained by trade routes (Dalsheimer and Manguin 1998), mercantile factors hardly explain the longevity of this tradition, with political expediency becoming a more likely cause (Lavy 2003).

The timeline begins with a Viṣṇu statue from Chaiya, in Surat Thani province, southern Thailand, most likely dating to the late fifth to early sixth century (Figure 8.5.5); some scholars have argued for a date as early as the fourth century (Lavy 2014; O'Connor 1972). Three additional Viṣṇu images from Nakhon Si Thammarat have the same approximate date. All exhibit typical Gupta sculptural characteristics with the relief images at cave 6 at Udayagiri in Madhya Pradesh providing clear stylistic comparisons. Tall floral mitres with bas-relief leaf and vine patterns, u-shaped sashes, and conch-on-hip configurations have antecedents in Kusana period Mathura and Gupta India of the second to fifth centuries (Lavy 2014: 157–60; O'Connor 1972: 32–40). These early images evidence the adoption of Indian models and norms from the early stages of Vaiṣṇavism in Southeast Asia.

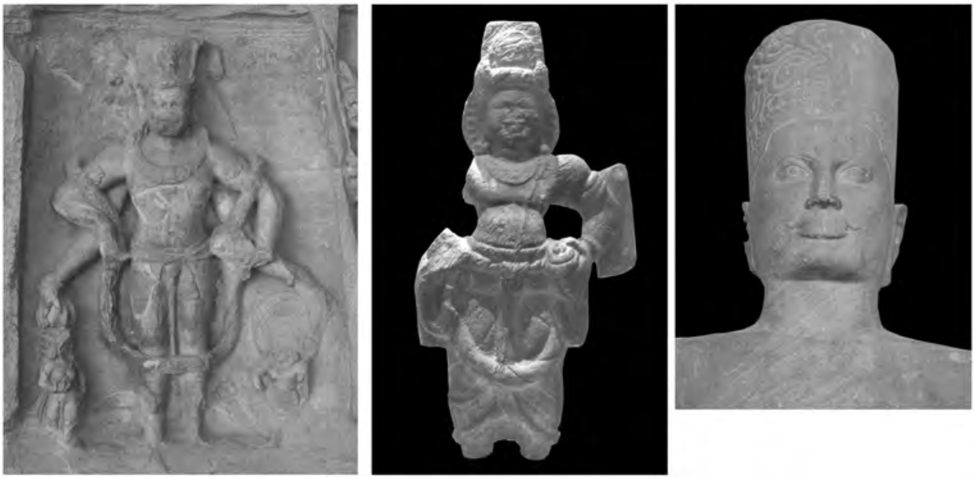

Figure 8.5.5 Left: relief image of a Gupta style Viṣṇu from cave 6, Udayagiri, India dated to 401 CE; middle: Viṣṇu found at Ho Phrai Narai, Nakhon Si Thammarat, Thailand, *c.*late fifth- to early sixth-century CE. Today housed in Nakhon Si Thammarat National Museum; right: detail of the head of the Prasat Andet Harihara dating to the late seventh century CE. Today housed in the National Museum of Cambodia (photographs by Stephen A. Murphy)

The evolving sculptural tradition over the following two centuries exemplifies localization. The tall mitre becomes refined, losing its floral motifs; the position of the conch switches to the upper left hand and the lower left hand now holds the club. The statues' physiques morph from short and fleshy figures to tall, larger-than-life-size sculptures with defined pectoral and chest musculature (see Guy 2014: cat. no. 60 and fig. 105). This tradition evolves to its apex in the seventh–eighth centuries and is best represented by a group of Vaiṣṇavite images from Phnom Da (see Dupont 1955: pls II–VI), a hill sanctuary south of Angkor Borei, and a Harihara figure from Prasat Andet (Jessup and Zéphir 1997: cat. no. 27). These sculptures embody a fully developed Khmer aesthetic; the Harihara's facial features are modelled on those of the indigenous population (Figure 8.5.5). These pieces present the creations of artists no longer aping received modes from India. This art is their own, with artists producing works reflecting uniquely Southeast Asian aesthetics.

What political or cultural factors explain the popularity of Viṣṇu and Harihara? Lavy shows that Viṣṇu, from his first appearance in Southeast Asia in a rock cut inscription from Ci-aruton in west Java, was associated with kingship and the conquest and expansion of territory (2003: 23–25). Jan Gonda (1969: 164–67) notes that an Indian ruler is an avatar of Viṣṇu (the King of Thailand, Rama IX, is today considered to be an avatar of Viṣṇu; Rama himself is an avatar of the same god). Kamaleswar Bhattacharya (1964: 72–78) argues that the monumental eight-armed Viṣṇu from Phnom Da represents a local king in divine garb. Paul Lavy (2003) convincingly argued that Harihara figures appear to embody a tactic by Śaivite rulers of Zhenla in northern Cambodia to exert their dominance over the Vaiṣṇavite Funan to the south.

While these examples illustrate the growing presence of Vaiṣṇavism in peninsular Thailand and southern Cambodia, Śaivism became the dominant state religion in the polity of Zhenla to the north from around the seventh century onwards (Lavy 2003: 32–33). Śaivism had long

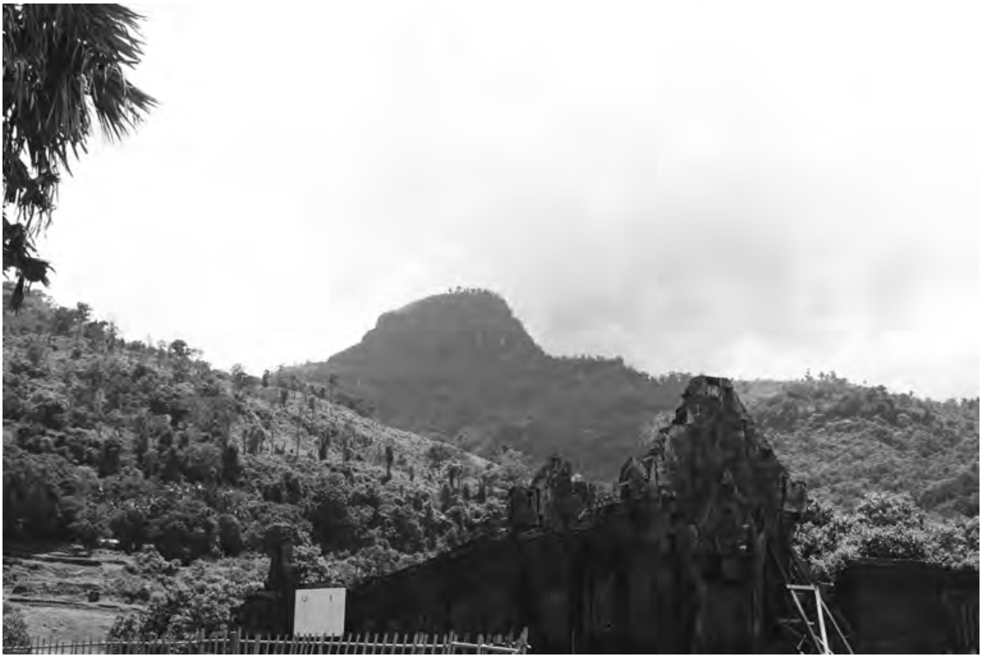

Figure 8.5.6 *Lingaparvata* overlooking Wat Phu, Champassak, Laos. The building under restoration in the foreground dates to the Angkorean period (photograph by Stephen A. Murphy)

been associated with Indian kingship. However, Śaivism also appears to be more malleable in grafting itself onto indigenous Southeast Asian cults than Vaiṣṇavism. The Liṅgaparvata, a mountain overlooking Wat Phu in southern Laos worshipped as a natural *liṅga* (Figure 8.5.6), best illustrates this malleability. The *liṅga* is a phallic, aniconic representation of Śiva; over time the depiction shifts from anatomically naturalistic to stylized forms. Śiva, in his earliest manifestations in Southeast Asia, often appeared as a *liṅga*. A number of examples erected by the ruler Citrasena in the Dangrek mountain range of north-east Thailand show that *liṅga* were associated with the conquest of territory (Dupont 1955: 56–57, 119–21; Lavy 2003: 26–27).

Based on Chinese sources and fifth–sixth century Khmer epigraphy, Bhattacharya argued that, prior to the arrival of Śaivism, an indigenous religion was present at Wat Phu focused on worship of the mountain's spirit, *Podouli* (1997: 36–39). Śiva is known as Giriśa or Giritra, 'Lord of the mountain' or 'Protector of the mountain' respectively, while his consort, Parvati, is 'Daughter of the mountain'. The close association between Śiva as a god of the mountain and the *liṅga*, a symbol of the god's fertilizing energy, made it readily adaptable to local cults. Using Śaivism to unify local deities, rulers exerted religious and political control over newly acquired territories, illustrated by erecting *liṅga*.

Zhenla included the Wat Phu sanctuary. This early polity developed in central and northern Cambodia in the seventh–eighth century. Its influence likely spread north of the Dangrek range to the Mun River area of north-east Thailand. The capital was Īśānapura, modern Sambor Prei Kuk in Khampong Thom province, Cambodia (Coedès 1968: 70–71). Finot (1912) first suggested this identification and Dupont (1955: 80–81) confirmed it by finding an inscription at the site. Īśānapura is located on the west bank of the Sen River; today numerous brick sanctuaries survive in varying states of preservation. As at Wat Phu, numerous inscriptions and *liṅga* give evidence for Īśānapura's adoption of Śaivism (Lavy 2003: 32–33). Inscription K.612 on a doorjamb in Īśānapura's southern group records the 627 CE foundation of a *liṅga* by King Īśānavarman I. More importantly, inscription K.80 equates Īśānavarman I directly with Śiva, indicating that the Khmer fully embraced the concept of kings invested with divine authority.

As with the Liṅgaparvata at Wat Phu, at Īśānapura we see the adaptation of indigenous religion to Śaivism and Śaivism to indigenous forms. Michael Vickery, analysing Khmer period inscriptions, concludes, as did Mus (1975), that the Khmer remained true to their indigenous, local deities, while incorporating elements of Indic religion. Sanskrit epithets were frequently used; the most common added the suffix '*–īśvara*' to a god's name, thus associating the deity with Śiva. However, it is likely that these were local gods renamed with Sanskrit titles rather than the wholesale import of monolithic Śaivism directly from India (Vickery 1998: 139–46; Wolters 1999). For instance, the form of Śiva worshipped at the Liṅgaparvata (Wat Phu) was called Bhadresvara. Vickery, reviewing seventh–eighth century inscriptions, identifies five instances where gods are clearly of local origin; he argues that they could best be referred to as Neak Ta, indigenous guardian spirits, whose worship survives today (1998: 144). Similarly, Vickery also proposes that the popularity of the goddess Durgā Mahiṣasuramardini at Īśānapura and elsewhere may represent a grafting of this female deity onto a local cult (1998: 154). Despite sculptural representation during this period (Jessup and Zéphir 1997: cat. no. 18; Guy 2014: cat. nos 63–66), Durgā Mahiṣasuramardini is never mentioned in inscriptions. As the slayer of the buffalo demon, perhaps she became equated with buffalo sacrifice, a ritual well attested to throughout Southeast Asia. Either way, in the sixth–seventh centuries local rulers cloaked their indigenous gods in Indian garb, exalting the old while revering the new.

Using these approaches to the gods, local rulers styled themselves using Indian kingship models. They added Indic royal suffixes to their titles, commonly the South Indian '*–varman*', 'shield', a tradition that continued into the Angkorean period. They invited Brahmins to their courts, not only associating themselves with the incoming religions and their rituals, but also benefitting from the skills and technical expertise these specialists possessed. The Pāśupata sect of Śaivism seems prevalent in seventh–eighth-century Cambodia. This sect was well established in India; practitioners were famed for their skill in Sanskrit grammar and knowledge of various philosophical and religions systems, including Buddhism (Bhattacharya 1997: 40). Pollock states, that Sanskrit cosmopolitanism was a '. . . way of political being' (2006: 133); Wolters (1999) points out the conditions under which cosmopolitanism was transmitted.

The temple complexes at Īśānapura indicate that Khmer kings not only utilized Indian ideologies and rituals; they also employed monumental architectural programmes to promote their reigns. Īśānapura temples are grouped into three complexes: north, central, and south (Shimoda and Shimamoto 2012). The north temple complex has a quincunx groundplan that continued into the Angkorian period. The octagonal temples are built of fired brick. However, doorjambs and lintels are sandstone, some of which are elaborately carved with floral and bas-relief narrative.

To the west of the three temple groups is a large moated city approximately 4 km^2 in area, where 82 sanctuaries have been recorded (Shimoda and Shimamoto 2012: 24–25). To the east of the temple zone, three causeways stretch toward the Sen River, one from each temple group. Ichita Shimoda and Sae Shimamoto's suggest that the city was entered via the river along these causeways (2012: 17–25). Thus visitors would be first greeted by the monumental architectural structures of the temple groups before entering the moated city zone, impressing on them the power and munificence of the rulers of Īśānapura.

By equating themselves with Indic gods, especially Śiva, the Khmer rulers of Zhenla successfully adapted the incoming religion to their own ends. A clear visual example of adaptation comes from a lintel discovered at the contemporary temple of Wat Eng Khna, 20–30 km south of Sambor Prei Kuk (see Guy 2014: cat. no. 88). It contains two scenes, one within the foliate garland arching along the upper part of the lintel, the other below it. The upper scene depicts the *lingodbhavamurti*, the myth that explains the origins of the *liṅga* (Bhattacharya 1961: 80). In this episode Viṣṇu and Brahma argue over which of them created the universe. A pillar surrounded by flames appears. Viṣṇu attempts to find the pillar's bottom, Brahma its top. Unsuccessful, they acknowledge the pillar as their superior. Śiva's head then appears in the pillar, revealing that this is his *liṅga*; this results in his superiority over both gods.

The lintel's lower scene depicts a king's coronation ceremony (*abhiṣeka*), replete with Brahmin ascetics and court officials flanking both sides. By placing the coronation scene directly under the *liṅgodbhavamūrti*, the Khmer king equated himself with Śiva. Presumably this lintel was placed at an entrance to a royal temple, making apparent the connection between Śiva and the king to all who entered.

The arrival of Brahmanical worship in Southeast Asia did not end local autochthonic deities. A synergistic effect occurred in which local gods acquired Indian epithets, thus manifesting themselves anew under the patronage of local kings. While these sculptures owed their origins to their Indian predecessors, they evidenced entirely indigenous aesthetics. These sculptures were, in turn, housed in monumental brick temples administered by a new Brahmin elite in service to the king. As with the Buddhist polities of Dvaravati and Pyu, the rulers of Zhenla and Funan employed the new religion's ceremonial and ritual trappings to impress upon the populace their power and munificence. Buddhism and Brahmanism became localized while maintaining sufficient sophistication and global cachet to insure their dominance and continuing state support. No better example of this can be put forward than the construction of a *liṅga* on Phnom Kulen in 802 CE as part of the consecration ceremony of Jayavarman II, the act that ushered in the beginning of Angkorian history and over 300 years of uninterrupted state Śaivism.

Conclusion

Seen through a contemporary lens, early- to mid-first-millennium Southeast Asian societies appear particularly receptive to global currents. Consisting of emerging polities nurtured through increasing trade across 'the single ocean', they had neither a developed writing system nor a unifying ritual basis. While processes of local socialization had clearly taken place throughout prehistory, these societies had not reached levels of density to fend off incoming South Asian global currents of Brahmanism, Buddhism, and Sanskrit cosmopolitanism.

Southeast Asians successfully managed the twin processes of globalization and localism, adapting Buddhist and Brahmanical practice to suit their situations. They capitalized on India's increasing interest in trade, the coherence of its cosmopolitan political and religious systems, and the perhaps fortuitous appearance of Indians of many persuasions on their shores to create autonomous polities with their own ideological systems, in other words, 'glocalities'. From the perspective of the *longue durée*, Southeast Asia in the mid-first millennium CE represents one of the crucial moments of globalization. Open to possibilities presented by incoming South Asian religious adepts spurred by the economic, administrative, and ideological structures of the Ganges Plain, Southeast Asian elites adapted and localized global currents. This fusion facilitated a transformation of their societies, setting them on trajectories leading to the formation of fully fledged, unique Southeast Asian Buddhist and Brahmanical states.

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8.6

Globalization in Southeast Asia's Early Age of Commerce

Evidence from the thirteenth century CE *Java Sea Shipwreck*

Lisa C. Niziolek and Amanda Respess

Introduction

Over the past several years, globalization has become one of the central concerns of anthropology, and, recently, scholars have debated its origin and social implications (e.g. Al-Rodhan and Stoudman 2006; Chase-Dunn 2000; Frank 1998; Hall *et al*. 2011). Some contend that it is a process associated with modern times, others that the first long-lived networks involving regular, trans-regional trade emerged between East Asia and the Mediterranean around 1000 CE, and yet others argue that there is evidence of globalization millennia ago (Frank and Gills 1992; O'Rourke and Williamson 2002; Stearns 2010; Wallerstein 2000; Feinman this volume; cf. Robertson this volume). It has become increasingly evident, based on a growing corpus of data, that long-distance economic and social interactions were very important in the ancient world in many different regions. For example, these significant extra-regional linkages are used by a number of scholars (e.g. Blanton and Fargher 2012; Hodos 2010) to investigate trends associated with globalization and how these trends are manifested in different societies at different times (e.g. Iron Age Sicily, prehispanic Mesoamerica, and the Huari of the Andean Wari civilization). According to Jennings (2011, this volume), two general features of globalization include an upsurge in long-distance connections and the emergence of a global culture. During the late first and early second millennium CE, Southeast and East Asia appear to have undergone these two major transformations.

Shipwrecks provide important information for reconstructing ancient trading networks, which can help us better understand the circumstances under which globalization occurs and its nature. The remains of a number of vessels found in East and Southeast Asian waters indicate a robust overseas trade (Diem 2004; Dupoizat 1995; Flecker 2001; Grave *et al*. 2005; Li 2009; Liebner 2014; Ridho and Edwards McKinnon 1998; Wade 2003, 2009) and each year dozens more wrecks are found. (Table 8.6.1, below, provides a summary of some of the better-studied ninth–thirteenth century CE wrecks found in Southeast Asia. Figure 8.6.1, below, shows their locations.) This chapter presents materials from the thirteenth century *Java Sea Shipwreck* (JSW) as a way to investigate globalization during this period and, specifically, to

Table 8.6.1 Selected shipwreck cargos from Southeast Asian wrecks (ninth–thirteenth centuries CE)

Wreck	*Provenience*	*Date*	*Ship origin*	*Possible destination*	*Cargo items*	*Cargo origin*
Belitung	Indonesia	AD 826	Arab or Indian	Middle East	Changsha ceramic bowls	China
					Other ceramics	China
					Gold work	China
					Silver work	China
Cirebon	Indonesia	10th century	Southeast Asia		Ceramics	China
					Glassware	North Africa, Middle East
					Pearls	Indian Ocean ports
					Precious stones	Indian Ocean ports
					Bronzes	India
					Bronze mirrors	Java
					Kendi	Southeast Asia
					Jewelry mold	Islamic
Intan	Indonesia	10th century	Indonesia	Java	Ceramics	China
					Fine-paste wares	Thailand
					Metal ingots	China, Southeast Asia
					Gold jewelry	Indonesia
					Bronze artifacts	Indonesia
					Mirrors	China
					Glass	Middle East
					Iron pots	China
					Organic materials	Sumatra
Pulau Buaya	Indonesia	12th–13th century	Southeast Asia	Sumatra or Java	Ceramics	China
					Iron wares	China
					Bronze gongs	China
					Lead slabs	China
					Cast-iron cooking vessels	China
					Iron bundles	China
					Silver ingots	China
Breaker Shoal	Philippines	11th–12th century	China?	Philippines, Borneo, Java, or Sumatra	Chinese ceramics	China
					Kendis	Southeast Asia?
					Lead ingots	China?
					Iron ingots	China
Java Sea	Indonesia	13th century	Indonesia	Java	Wrought-iron bars	China
					Ceramics	China
					Cast-iron pots	China
					Fine-paste kendi	Thailand
					Indian-style ceramics	Southern Thailand?

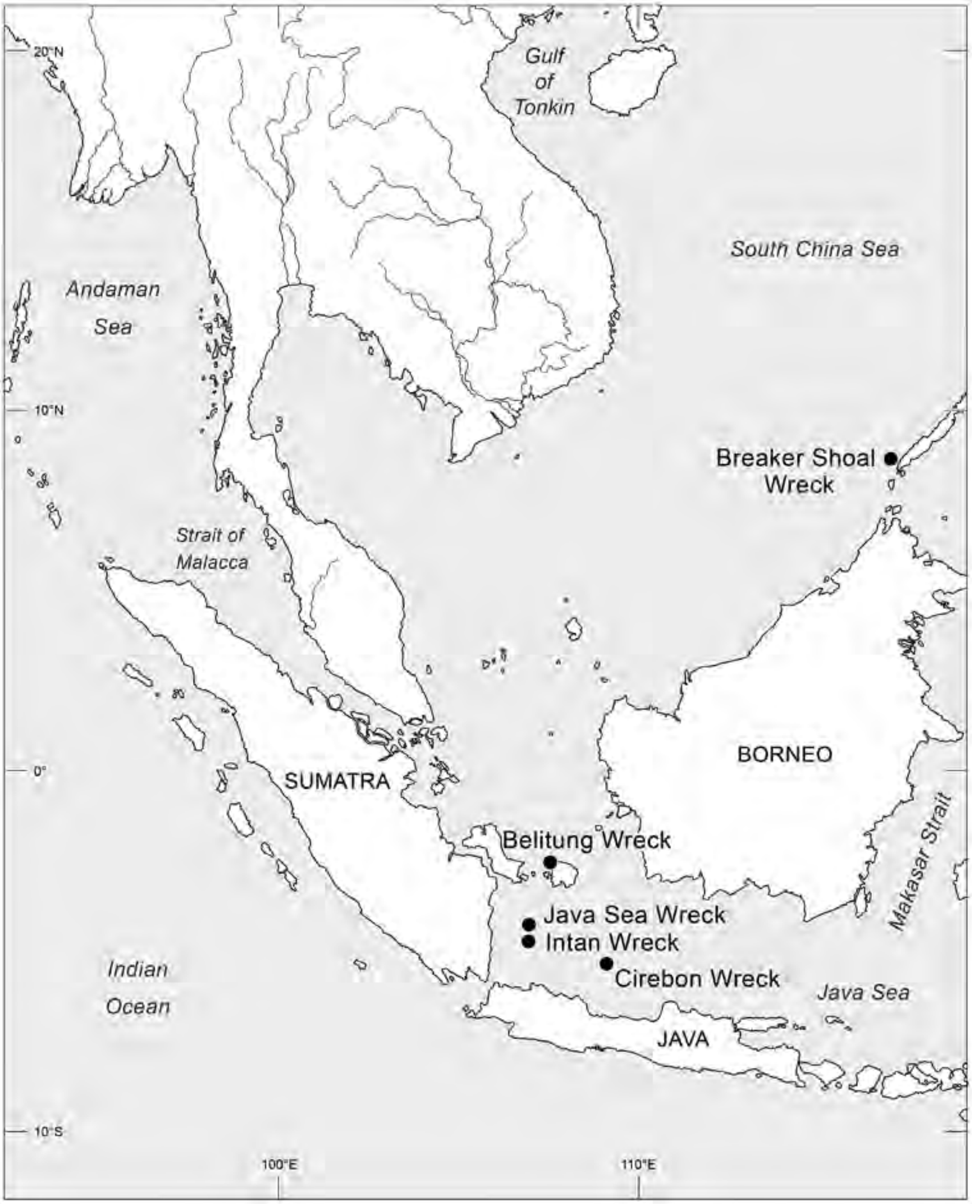

Figure 8.6.1 Map showing locations of the *Java Sea Shipwreck* and other well-studied ninth- to thirteenth-century CE wrecks in Southeast Asia. (Illustrator David Quednau)

evaluate the applicability of Jennings' framework (2011, this volume) to maritime Southeast Asia. Within this single vessel and its cargo, multiple geographic regions (East and Southeast Asia and the Middle East), artistic traditions (Chinese *qingbai* ceramics and Thai *kendis*), ideologies (Indonesian myths and Buddhist symbolism), and individuals of different vocations and cultural backgrounds (Chinese potters, Muslim or Middle Eastern merchants, Buddhist monks, and Javanese elite) are represented in the material record and linked through maritime routes.

Such analyses can enable us to better understand the transformative roles of early cross-cultural connections on local economies, politics, and cultural practices.

Southeast Asia's Early Age of Commerce and the Nanhai trade

Long-distance trade and culture contact in East and Southeast Asia and the Indian Ocean World is repeatedly described by Chinese, Middle Eastern, and European travelers, traders, missionaries, pilgrims, and officials (e.g. Dreyer 2007; Dunn 1989; Polo 2008; Rockhill 1913, 1914, 1915a, 1915b; Wu 1959; Zhao 2012 [1911]). These descriptions have served as the foundation for much of the historical analysis undertaken on Southeast Asia, which often positions maritime commerce as starting in earnest during the fifteenth century CE. In a 2009 article, Wade argues that Southeast Asia's "Age of Commerce," traditionally envisioned by Reid (Reid 1988a, 1988b) as covering the fifteenth through seventeenth centuries, should include an earlier period from 900 to 1300 CE, called the "Early Age of Commerce." During this Early Age of Commerce, Wade identifies many significant changes that were taking place in Southeast Asia, such as increased trade, the spread of Islam and possible introduction of Christianity, and the emergence of new technologies associated with warfare (2009: 238–58). These changes were largely influenced by the region's relationships with East Asia and the Indian Ocean World – we propose that these changes reflect globalization.

Known as the *Nanhai* (or the land of "the Southern Ocean") by the Chinese and *Suvarnadvipa* (or "Golden Island") by Indian writers (Wheatley 1975: 232), Southeast Asia has long been noted for its environmental, linguistic, political, and cultural diversity (Andaya 1992: 537; Higham 1989: 1). It has been difficult, however, for scholars to define the region as a whole and to develop a clear understanding of both shared and divergent cultural practices in mainland and island Southeast Asia. Before the sixteenth century CE, Southeast Asian "lowland wet rice states" or "river plain states" (e.g. Burma (Myanmar), Thailand, Cambodia, Laos, and Vietnam on the mainland and Java) were heavily focused on subsistence economies that took advantage of the fairly flat and fertile soils in these areas (Hall 1985: 19). These agrarian states largely centered on administratively controlled subsistence production, which included water management and food acquisition through forced labor, tribute, and oaths of loyalty as well as some prestige goods exchange. In contrast, the political economies of the "maritime trading states" or "riverine coastal states" in pre-modern island Southeast Asia (e.g. the coastal areas of the Indonesian archipelago, the Malay Peninsula, and the Philippines) were based primarily on prestige goods, or wealth finance, rather than subsistence goods (Hall 2011). Foreign trade was the foundation of these maritime trading polities, which incorporated complex coastal-hinterland networks through which imports, often prestige goods, went from the ports inland and exports, often natural forest products, were moved toward the coast for distribution to markets abroad (see Bronson 1977). Reid observes that Southeast Asia was "[u]niquely accessible to seaborne traffic and commanding the maritime routes between China . . . and the population centers of India, the Middle East, and Europe, the lands below the winds naturally responded to every quickening of international maritime trade" (1988a: 1).

Whereas earlier historical and archaeological work tended to focus on culture history and diffusion at the local scale, more recent historical and archaeological research has centered on the complex long-distance connections Southeast Asian societies had with diverse communities throughout the world over time (e.g. Brown 2009; Carter 2012; Chang and Tagliacozzo 2011; Diem 2004; Dussubieux *et al.* 2010; Grave and Maccheroni 2009; Hall 2011; Heng 2009; Junker 2004; Manguin 2004; Miksic 2011; Ptak 2001; Sen 2006; Wade 2009; Whitmore 2006;

Wong 2010). Although the region was influenced by what was happening around it, its inhabitants also directly contributed to the social, political, and economic events and processes that took place. Throughout its history, Southeast Asia has been both an entrepôt and driver of trade (Brown and Sjostrand 2001: 11; Guy 1986: 1) and, as Lape argues, should not be considered as merely lying between other places (2003: 102) (e.g. China and India).

An upsurge in long-distance connections

Two main features associated with globalization that can help with identifying it, according to Jennings (2011, this volume), are an increase in long-distance connections and the development of a global culture. The first of these is evidenced by an increase in the production of one of the most frequently traded commodities – high-fired ceramics from China – and their wide distribution. During the Early Age of Commerce, China's ceramic export industry flourished as ceramics and silk replaced metal as major mediums of exchange (Flecker 2003: 396; Guy 1986: 14). Evidence of the large-scale, intense production of ceramics abounds in China in the form of massive kiln complexes such as those found at Jingdezhen, Changsha, and Foshan (Ho 1994; Hughes-Stanton and Kerr 2000; Mino 1992; Scott 1993; Wood 2011; Ye 1994). The marked increase in both coastal and inland kilns near the port at Quanzhou in southeastern China in the Song-Yuan period (960–1368 CE) reflects the heightened demand for Chinese ceramics in overseas markets (So 2000: 190). The widespread dispersal of Chinese ceramics throughout East, Southeast, and South Asia, East Africa, and the Middle East further attests to increased long-distance exchange and cultural interaction (Chaudhuri 1985; Hall and Whitmore 1976; Jacq-Hergoualc'h 2002; Kauz 2010; Kusimba 1999; Oka *et al.* 2009). In the Philippines, for instance, large quantities of Chinese trade ceramics, and later Vietnamese and Thai pottery, found at elite habitation sites and burials are the result of large-scale foreign trade (Fox and Legaspi 1977; Junker 1999; Nishimura 1992; Tenazas and Hutterer 1968; Wong 2010). Shipwrecks found in Philippine and other Southeast and East Asian waters carrying cargos of mostly Chinese export ceramics – but some transporting items from Southeast Asia and elsewhere to China – also indicate vigorous overseas exchange networks not only in East and Southeast Asia but in the Indian Ocean region as well (Diem 2004; Dupoizat 1995; Flecker 2001; Grave *et al.* 2005; Li 2009; Wade 2003).

A global culture: a case study

In the late 1980s, the remains of a thirteenth-century trading vessel were found by fishermen in the Java Sea, between Sumatra and Java (Flecker 2001, 2002, 2003, 2005–2006, 2009; Mathers and Flecker 1997) (Figure 8.6.1). In 1996, a commercial salvage company, Pacific Sea Resources, in collaboration with underwater archaeologist Michael Flecker, undertook the mapping of the site and the recovery of the material. Half of the artifacts were given to the Indonesian government (Flecker 2011); the other half, close to 8,000 objects, were donated to The Field Museum in Chicago. This vessel carried an international cargo that included goods from places such as China, Thailand, and Sumatra, some of which bear evidence of the global nature of trade and cultural interaction at the time (Table 8.6.1). The *Java Sea Shipwreck* (JSW) boat is estimated to have been at least 28 meters long and 10 meters wide. Although the structure of the ship did not survive, based on the shape of iron concretions, the sparse remains of tropical wood including at least one piece with a dowel hole, and anchor type, Flecker (2003: 391–95) has hypothesized that the ship was built in Indonesia. Using radiocarbon dating of resin found on board and ceramic styles, the wreck was initially dated to the second half of the thirteenth century (Brown 1997;

Flecker 1997). Flecker (2003: 395) proposes that the boat likely left China for Java, and many of the goods on board – which originally included an estimated 100,000 ceramic vessels and 200 tons of iron – would have been traded for pepper and other spices or provisions. Java was famed for its pepper and is identified by Zhao Rugua, a customs inspector at the Chinese port of Quanzhou during the Song Dynasty, as the origin for much of China's imported pepper in the thirteenth century (Zhao 2012 [1911]: 78, 223).

The JSW vessel was sailing in a complex network of international connections. According to Jennings (2011, this volume), along with expanded inter-regional interactions, the second major change associated with globalization – a global culture – encompasses eight, often interrelated, trends: time–space compression, deterritorialization, standardization, unevenness, cultural homogenization, cultural heterogeneity, the re-embedding of local culture, and vulnerability. Although it would be useful to trace these characteristics through multiple archaeological assemblages, we will limit our analysis to how Jennings' features of a global culture are present at the scale of the JSW in order to show how even a single assemblage, positioned in its historical context, can be used to investigate globalization.

Time–space compression

"Time–space compression" refers to the idea that "the speeding up of economic and social processes shrinks one's experience of space and time" (Jennings 2011: 123), leading an individual to feel more connected to the rest of the world. A commonly cited modern example, because it can link people separated geographically and with vastly different backgrounds, is the Internet. Other ways that time and space can be compressed are through the building of roads and transportation innovations. During the Early Age of Commerce, shipbuilding technology advanced in Southeast Asia and the Indian Ocean World (Manguin 1993), making it easier to traverse wide expanses of water and connect with communities thousands of miles of away. Its cargo was primarily from China, but evidence indicates that the JSW vessel was made in Southeast Asia. Although only a few small fragments of wood were recovered at the wreck site, one was found to be *Parastemon urophyllum* (mandailas), a tropical tree species from Southeast Asia and the Pacific (Flecker 2003: 392). Mandailis wood is hard and heavy and resistant to the toredo worm, making it excellent hull material. In addition, two pieces of wood from the wreck appear to have dowel holes for wooden pegs and are related to lashed-lug construction, a technique associated with traditional Southeast Asian shipbuilding. The tenth-century *Cirebon* and *Intan Wrecks*, both found in the Java Sea were also lashed-lug vessels (Flecker 2002; Liebner 2014). The ninth-century *Belitung Wreck* represents shipbuilding practices from the Middle East and is the earliest evidence of an Arab vessel sailing the waters of Southeast and East Asia (Flecker 2008). Through the use of these ocean-going vessels, communities as distant as China and the Middle East came into contact with each other more quickly than before and at a scale never before seen.

Deterritorialization

Deterritorialization essentially is the weakening between the ties of cultural practice and a fixed geographic place (Jennings 2011: 125–27). This can occur with the introduction of foreign ideas, goods, and people into local contexts. Archaeologically, deterritorialization can be seen, for instance, in the adoption of new, external pottery assemblages or burial practices that reflect traditions from outside the local community. Maritime trade is one of the major ways new ideas, technologies, material objects, and people flowed from one place to another in the Early Age of Commerce. One of the examples Jennings uses to illustrate deterritorialization today is the high-fashion or art centers of Paris, New York, Tokyo, and Milan (2011: 125). Likewise, China, especially the port of Quanzhou, the JSW vessel's likely port of origin, became associated with ceramics that were in demand halfway around the world. International ports themselves provided another arena in which deterritorialization took place. At these centers of commerce, foreign traders brought not only the goods they were selling but also their cultural practices and beliefs. For example, for most of the first millennium CE, trade in the South China Sea region was dominated by Arabs, Persians, and Indians and communities of foreign merchants were established throughout Southeast Asia and in China, especially during the eighth and ninth centuries (Brown and Sjostrand 2001: 13; Christie 1999: 246; Flecker 2008; Guy 1986: 4–9). It was not until the tenth century that China began to take a more active role in trade (Brown and Sjostrand 2001: 13; Guy 1986: 13). Oftentimes, merchant guilds were associated with religious institutions, and temples, monasteries, mosques, and churches served as ritual, social, and economic anchors in these foreign communities (Christie 1999: 224; Hall 2010).

Standardization

Another feature of a global culture is standardization. Jennings defines standardization as a "common idiom . . . needed in order to facilitate interaction and make each group's action comprehensible to the other" (2011: 127). A relatively straightforward expression of standardization is weights and measures. In all, two balance bars and 14 scale weights were recovered from the JSW, representing several weight categories belonging to an Indonesian weight system (Flecker 2003: 396). Some of the weights have scalloped edges, which may have prevented them from being filed down and devalued (Kenneth Hall, personal communication, May 7, 2014). Pieces like this, with standard values, would have been necessary to ensure fair and predictable commercial transactions in each region. Another example of standardization is evident in the metal cargo at the JSW wreck site. Because of the uniform shapes and sizes of the iron and copper ingots, these pieces would have been easy to transport, store, and, later, shape into the desired forms. Such standardization also would have facilitated production of these metals for trade. The JSW was likely bound for central or eastern Java, possibly Tuban, one of the emerging Majapahit empire's most prosperous ports (Flecker 2005–2006; Hall 2011; Mathers and Flecker 1997). Because iron from China would have been less expensive than locally produced iron, large quantities of it were imported into the region (Christie 1999: 228).

Unevenness

Perhaps one of the most contentious debates in globalization and global culture is the concept of unevenness, or hegemony. Many scholars (e.g. Wallerstein 1974) argue that, as inter-regional connections expand, certain regions wield more economic and political power than others (Jennings 2011: 130). Although more recent scholarship argues for more agency-based perspectives that bring to light societies previously viewed as being on the "periphery," it is difficult to deny that some regions controlled the production and distribution of certain commodities or the dissemination of certain ideas. Several areas of unevenness are apparent in the JSW cargo. It is clear that China dominated trade in high-fired ceramics and low-quality iron at the time. Other areas of the world did not have the technology or materials to make porcelain and Southeast Asian iron producers could not compete with China's mass production of a cheaper (but low-quality) product. Java and other parts of island Southeast Asia, however, had much of the market cornered for spices, especially pepper. Such spices likely filled some of the 80 plus storage jars found on board the JSW and made up a major part of the trade in perishables at the time.

The trade of plant and animal components for use in medicines also was a vital part of maritime exchange across the South China Sea and Indian Ocean Worlds, and Southeast Asia was the source of many of these materials. While the Southeast Asian political elite of Srivijaya, Majapahit, Pagan, Angkor, Champa, and Da Viet procured gold, lead, tin, iron, copper cash, silk, beads, and high-fired ceramics from China, India, the Middle East, and East Africa, polities such as these exported exotica such as spices, beeswax, aromatic resin, ivory, rhinoceros horn, tortoise shell, coral, pearls, crystal, birds' nests, tropical hardwoods, cotton, and marine delicacies to China and elsewhere (Hall 1985, 1999, 2011; Kauz 2010; Kusimba 1999; Miksic *et al.* 1994; Reid 1988a, 1988b; Scott 1989; Wade 2009; Wheatley 1959; Wu 1959). Centuries of underwater disintegration have largely erased the archive of whatever botanical goods were carried by the JSW vessel, but a number of pieces of unworked elephant tusk and blocks of resin from the cargo provide potential clues about the exchange of medical goods along the trade routes (Mathers and Flecker 1997: 81; Respess and Niziolek 2016). Ivory and resin were utilized for numerous purposes in their export destinations, including use in medicines. Ivory also was imported to China as a prestige good from Vietnam, Thailand, and Sumatra, and re-exported from African or Indian sources via the Arab ivory trade (Mathers and Flecker 1997: 28–29, 81; Respess and Niziolek 2016; Zhao 2012 [1911]: 232). Likewise, Zhao Rugua listed aromatic medicinal resins of Persian and Arab origin, including camphor, frankincense, myrrh, dragon's-blood, dammar, liquid storax, and benzoin in his depiction of trade in Fujian in the twelfth and thirteenth centuries (Zhao 2012 [1911]: 193–202). It is possible that some of these commodities actually may have originated in Southeast Asia and been wrongly ascribed by Zhao to the Middle East or misleadingly advertised as having come from there.

Homogenization

Jennings writes that cultural homogenization, "which goes beyond the widespread dissemination of foreign objects or people . . . [and] entails the diffusion of a way of being," is perhaps the most frequently cited feature of a global culture (2011: 132). Moving beyond the widespread dispersal of the JSW ceramics as objects, we can view them as material manifestations of common, shared cultural ideas and practices. Chinese porcelains in East, Southeast Asia, and other parts of the Indian Ocean World were not desired merely for their function or designs. Rather, they were used as social currency in political competition and as religious tribute. In the prehispanic Philippines, for example, Chinese ceramics are differentially distributed at elite habitation sites and graves and were used as status displays at feasts, weddings, and burials (Junker 1990, 1993, 1999; Junker *et al.* 1994; Junker and Niziolek 2010). Commoners had almost no access to these pieces. In Java, the *kendis* and other objects, such as ivory and resin, from the JSW also relate to homogenization in their association with shared religious rituals and medical practices between the Middle East, India, Southeast Asia, and China (Respess and Niziolek 2016). Among the ceramics recovered from the wreck, like many found at archaeological sites throughout Southeast Asia, are pieces with clear medicinal applications including wide-bodied *kendis* (Figure 8.6.2) likely used in the preparation of brewed medicines, ambrosia bottles possibly intended for use in medical rituals, and hundreds of small boxes popular throughout the region for the storage of medicines, perfumes, mirrors, jewelry, and cosmetics (Brown 1997). Many of these boxes are inscribed with text and decorative motifs from China and the Middle East. Several inscriptions stand out because of their possible relation to fertility medicine, including a *qingbai* box base with what resembles a phallus from which a Near Eastern-style vegetal scroll flows copiously outward (Maura Condon, personal communication, 2012).

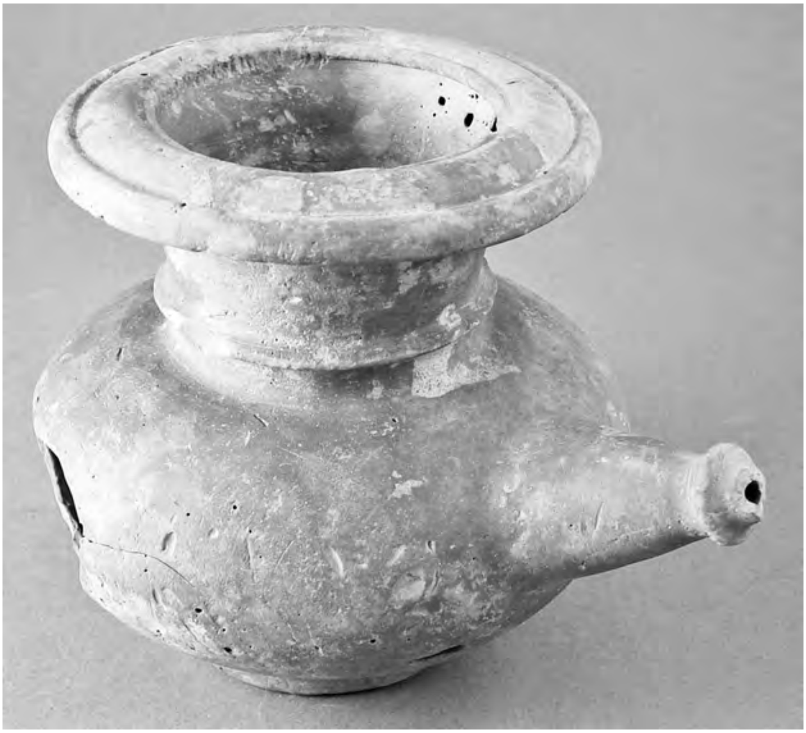

Figure 8.6.2 Kendi from the *Java Sea Shipwreck*. (© The Field Museum, Cat. No. 350678)

Heterogeneity

Whereas cultural homogenization connects people through commonalities, cultural heterogeneity also emerges as part of a global culture and is tied to diversity (Jennings 2011: 134–36). Through cultural heterogeneity, foreign elements from various communities connected through globalization are introduced into each local community. Thus, each community becomes more diverse in terms of cultural practices and materials that comprise it. Although the JSW ceramics are largely from China, inspiration for their forms and designs comes from elsewhere. The strap handles on many of the Cizhou-style and *qingbai* ewers echo those found on metal ewers from the Middle East and Central Asia (see Gray 1940/41). The *kendis*, possibly made in southern Thailand, are similar to Indian-style pottery, as are the gourd-shaped ambrosia bottles from China. One of the ceramic box covers exhibits a basket-weave design drawn from lattice designs found in Islamic art and architecture. Archaeological evidence at sites throughout Southeast Asia and along the Indian Ocean from this time period also demonstrate the cultural heterogeneity of a global culture (e.g. Chinese ceramics found at Old Hormuz in the Persian Gulf (Morgan 1991) and Fort Canning in Singapore (Miksic 2006)). It is important to note that new, shared practices can emerge through the creation of hybrid objects such as those combining East Asian and Middle Eastern elements. Such objects can give rise to new forms of identity and associations.

Other ceramics incorporate design motifs that can serve as symbols or references to diverse belief systems that could have provided a common visual vocabulary for producers, traders, and consumers with shared practices. One of the floral motifs commonly observed on the JSW

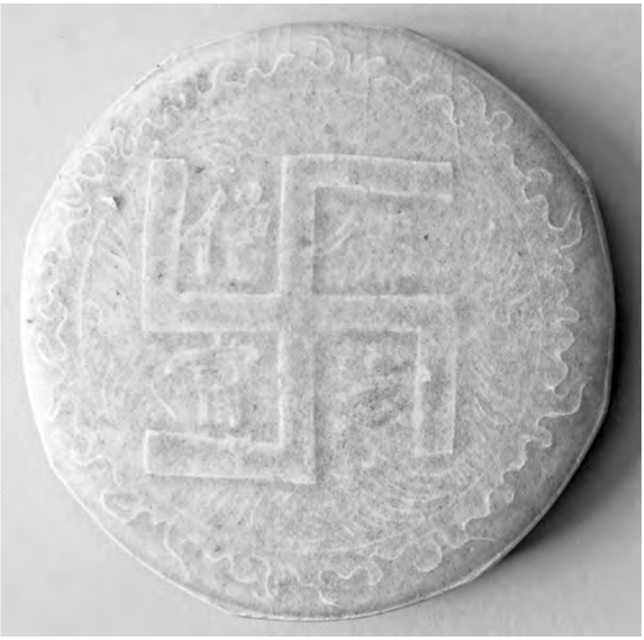

Figure 8.6.3 Covered box lid with swastika and Three Jewels of Buddhism inscription from the *Java Sea Shipwreck*. (© The Field Museum, Cat. No. 344720)

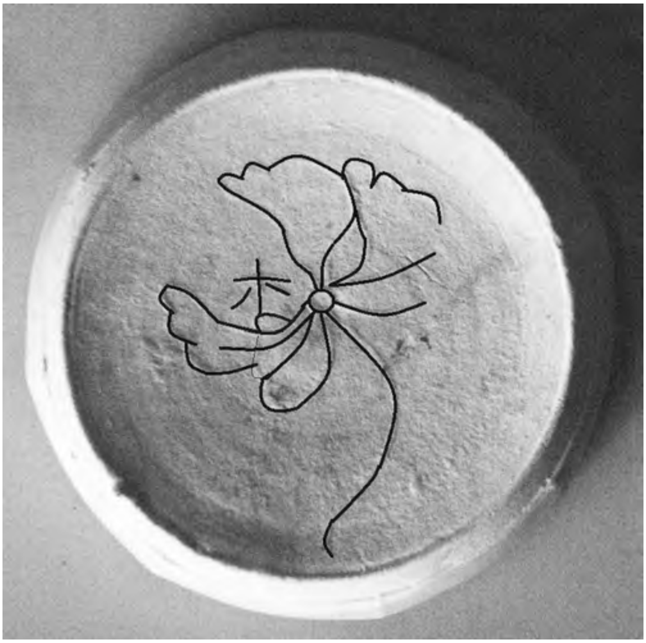

Figure 8.6.4 Covered box base with molded peony and cross-shape from the *Java Sea Shipwreck* (design highlighted). (© The Field Museum, Cat. No. 345136)

boxes is a lotus flower, which has a strong association with Buddhism, one of the major belief systems, along with Hinduism, in Southeast Asia at the time. One box lid makes direct reference to Buddhism, with the swastika and an inscription of the foundation of Buddhist teaching: the Three Jewels of Buddhism (Buddha, Dharma, and Sangha) (Figure 8.6.3). Another example comes from another ceramic covered box base, which appears to have, intermingled with a traditional molded peony flower, a cross-shaped symbol incorporating a Chinese character. This shape emerging from a flower is similar to images associated with Nestorian Christianity, a religion that came to China from Western Asia in the mid-first millennium CE (Figure 8.6.4). A similar symbol is found on gravestones dated to the Song-Yuan period at the port city of Quanzhou (Lieu 2012).

Re-embedding

While many features of global culture are based on similarities, one – re-embedding of local culture (Jennings 2011: 136–39) – is based on cultural uniqueness. Re-embedding takes place as communities attempt to maintain or strengthen their local identity, or even invent a new one, in response to the homogenizing effects of globalization. Although hard to document archaeologically, several artifacts from the JSW may serve as expressions of re-embedding. Jennings' definition of re-embedding relies on culture being linked to location. If this concept is expanded, and culture is thought of more as a community of practice (see Eckert and McConnell-Ginet 1999: 186), re-embedding can be a strategy employed by various actors involved in maritime exchange networks to maintain their own cultural identity. One example of re-embedding may lie with a unique metal figure, possibly the possession of a crew member, that depicts a woman riding a sea creature. Miksic (1997: 85) proposes that the image reflects a Hindu myth recorded in an ancient Javanese text, *Sri Tanjung*, and referenced on Javanese temple reliefs (see Kieven 2013: 241–69; Wolters 1999: 239). This story tells of a princess who was wrongly accused of infidelity while her husband was away. In a fit of jealousy, her husband killed her before she had time to make preparations for her soul's salvation and she was carried into the next world by a monstrous fish. If the person to whom this piece belonged, like the ship, was Indonesian, he may have been carrying the piece as a totem of maritime safety and female fidelity and as a reminder of his ties to his home community.

Another instance of potential re-embedding is the Perso-Arabic script on the bases of two ceramic boxes (Figure 8.6.5). During the Early Age of Commerce, Indian, Arab, and Persian traders set up merchant neighborhoods at ports (Christie 1999: 245–48; Guy 2001: 290–94), establishing local communities of their own overseas in which they often maintained many of their own beliefs and practices (Hall 2010). While the multidirectional influences of form and designs on ceramic materials from the South China Sea and Indian Ocean regions are well known, specific material examples of merchants' involvement in production and distribution are less studied. The Perso-Arabic script may be the marks of Muslim or Middle Eastern merchants, or even producers, who may not have been able to read Chinese but still needed to mark their product (e.g. Davison 1987: 11). The inclusion of such a script also could be indicative of the potential consumers of these pieces – it only would have been legible within a shared linguistic community situated along these maritime routes. (If more evidence of such marks is found on other archaeological materials, it has the potential to inform us about how these objects were distributed and the social networks involved.) These Muslim or Middle Eastern communities may have wanted to maintain their language as a source of identity and information within these massive trade networks and, in a sense, rejected local practices and reasserted their own identity through language.

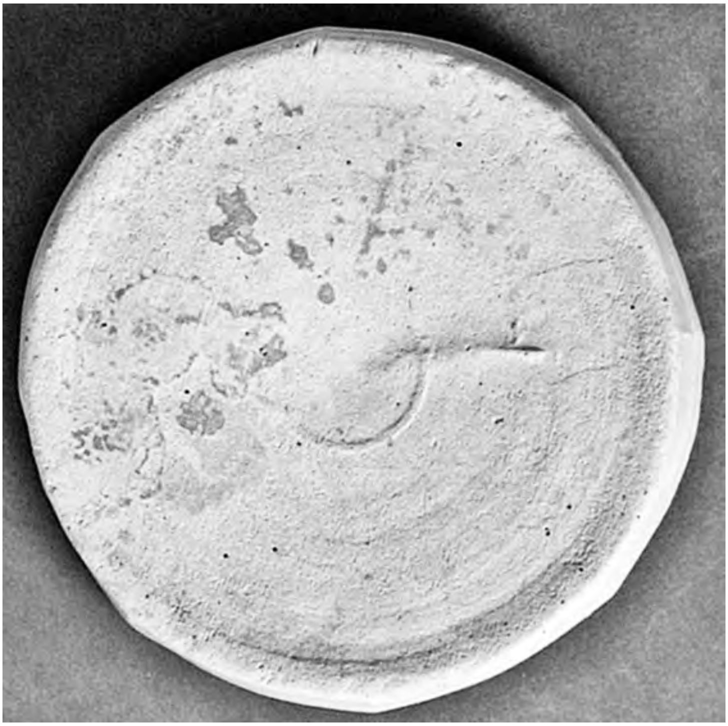

Figure 8.6.5 Covered box base with Perso-Arabic script (possibly Xiao'erjing) from the *Java Sea Shipwreck*. (© The Field Museum, Cat. No. 345095)

Vulnerability

The last characteristic of global culture is vulnerability: "Increased vulnerability occurs when the interconnections forged by globalization make places increasingly dependent on actions that are occurring in other places around the world" (Jennings 2011: 139). Economic vulnerability might be the most apparent type, but vulnerability also can be mental and emotional. Materially, vulnerability (or the perception of being vulnerable) is evident in the JSW in a number of ways. One is the sheer volume of iron that was on board – more than 200 tons. Because of their desire to move such a large quantity of product for profit, the merchants or ship owners put themselves, their crew, and their ship at risk. Although the cause of the ship's sinking remains a mystery, it is possible that it was overloaded. Such a large shipment of iron also belies the vulnerability of the Javanese market to which it was likely traveling. Because it was iron-poor, Java relied on the importation of iron for the production of agricultural implements and other tools. More importantly, it required iron to manufacture weapons, which were essential for maintaining a strong military to protect (or protect against) the newly emerging Majapahit empire and its resources, including ports and spices (Hall 2010: 10–11). Thus, one of the ways to lessen vulnerability is through risk mitigation. In the context of maritime trade, this also can be seen in the practice of merchant guilds that protected the interests of traders, port regulations that safeguarded valuable local relationships between coastal and hinterland populations, and merchants taking port wives who maintained local social connections when the merchants were abroad.

The *Breaker Shoal Shipwreck:* a comparison

One wreck that provides a good comparative collection to the JSW is the *Breaker Shoal Shipwreck* (BSW) at the National Museum of the Philippines (NMP) (Figure 8.6.1). This ship sailed along the western coast of Palawan, through what is known as the "Palawan Passage" (Flecker 2002; Goddio 1997). Archaeological evidence in the form of shipwrecks suggests that this seaway received considerable traffic during the early to mid-second millennium CE.

Discovered by fishermen in 1991, the BSW (Dupoizat 1995) was excavated by researchers from the European Institute for Underwater Archaeology (EIUA) and NMP. The wreck site was located 5 meters below the water's surface and about 13 kilometers west of the island of Palawan in the western Philippines. Although the BSW is dated a century earlier than the thirteenth-century JSW, its ceramic cargo is strikingly similar. Unlike the JSW vessel, however, the BSW, as suggested by Dupoizat (1995) based on anchor type, appears to have been built in China (see Kimura *et al.* 2011). (Securely assigning an origin to this boat, however, is difficult given that none of the hull survived.)

Chinese ceramics make up the majority of the remaining cargo and, like the JSW cargo, these ceramics include green glazed (celadon) and olive green glazed bowls and dishes (or saucers); dark brown to black glazed *(temmoku)* teabowls; *qingbai* bowls, dishes, covered boxes, and small 'Marco Polo' vases with characteristic light blue glaze; storage bottles (likely used to transport mercury or rice wine); ambrosia bottles; and painted ewers and vases. Flecker (2003) hypothesizes that the BSW vessel could have been traveling to the Philippines, Borneo, Sumatra, or Java. In places such as the Philippines, high-fired ceramics from China (and later from Thailand and Vietnam) are often found in mortuary contexts (Barretto-Tesoro 2010; Fox 1959, 1967; Fox and Legaspi 1977; Guthe 1927, 1929, 1938; Junker 1999), however, in other parts of Southeast Asia, including Sumatra and Java, similar ceramics would have been used in other religious contexts as well (Guy 1986) and many are found at port sites throughout the region (Miksic 2011). Flecker (2003: 41) asks,

> If the end use of the ceramics was different, and certainly the cultural context of the two markets was, why were the cargoes nearly identical? Did the Chinese exporters, rather than the Southeast Asian importers, select the types of ceramics to be shipped to Southeast Asia?

The networks of which these trading vessels were a part were transformative for the societies involved in them. In the prehispanic chiefdom of Tanjay in the central Philippines, for instance, Chinese ceramics replaced locally made decorated earthenware as items of prestige (Junker 1999). Furthermore, it was not only coastal polities that participated in or were affected by these large trading networks. Tribal and hunter-gatherer communities living in the hinterlands supplied many of the products that formed the basis for overseas trade with China, and they also integrated materials from China and other foreign places into their own status displays (Hall *et al.* 1976; Junker 1999, 2002; Miksic *et al.* 1994). In Java, the likely destination of the *Java Sea Shipwreck* vessel, inter-regional trading significantly altered the local economy and technologies and financed the growth of influential polities such as the Majapahit empire (Christie 1999). In East Africa, these global networks had profound impacts on coastal and interior societies as far as southern Zambezia, nearly 1,000 kilometers from the coast (Oka and Kusimba 2008).

Conclusion

Remnants of material culture left in the wakes of shipwrecks such as the *Java Sea Shipwreck* can do more than help archaeologists document a single point in time of a single society; they have the potential to illuminate social changes that were occurring across many societies linked through trade. As Christie notes, increased foreign trade in Island Southeast Asia during the tenth to thirteenth centuries affected domestic consumption and status display, local industries, and regional economies, among other areas (1999: 224–25). Notably, in Java during this period, there was an increase in rice cropping for export, probably as a result of increased export trade. This rice, and other agricultural products, was used to finance the purchase of luxury goods and materials such as metals (Christie 1999: 226) – both of which were represented in large quantities in the JSW cargo. Regarding the JSW, the expanded influence of Islam and Muslim merchants on maritime trade in the South China Sea region might be seen in the Perso-Arabic script present on two of the covered box bases; advances in shipbuilding technologies enabled the trade of bulky, heavy items over long distances, facilitating the transport of staple goods along with luxury items as well as lower-quality products for mass consumption; and the sheer quantity of ceramics found at the wreck site reflects the massive scale and high intensity of production taking place in China to meet foreign demand for ceramics for use in religious rituals and secular traditions.

The objects found on board the JSW are linked to practices and traditions, including those associated with production, distribution, consumption, and discard, which varied by place and community. Furthermore, these objects are ways by which individuals and communities were passively connected and by which they actively connected with each other. Some objects might have been tools used to facilitate change, such as preciosities that may have served as gifts to build social alliances and sway opinions (e.g. finely made porcelains or marine delicacies); others might have been used to preserve cultural traditions (e.g. a certain figure or design that recalls stories from home).

In this chapter, we have argued that the Early Age of Commerce (*c.*900–1300 CE) in East and Southeast Asia (Wade 2009) be considered one of the world's periods of globalization, in addition to those periods and places outlined by Jennings (2011) and others. During this period, there is ample evidence for an increase in long-distance connections that linked the South China Sea region and the westernmost parts of the Indian Ocean World. Furthermore, historical and archaeological evidence suggests that a global culture, as defined by Jennings (2011, this volume), developed. The *Java Sea Shipwreck,* as well as the remains of other wrecks such as the *Breaker Shoal Shipwreck*, can be used to help illustrate not only an increase in the production and exchange of commercial goods, such as ceramics and spices, but also aspects of global culture, including shared and modified medical practices. These wrecks hold important clues for understanding the mechanisms by which material culture, technology, practices, and ideas were shared and transformed by communities, some near and some far, linked through maritime trade and exchange. When viewed together, numerous shipwrecks from different periods and regions also could have the potential to serve as the starting point for a multiscalar, deep-time, and networked approach to globalization advocated by Feinman (this volume) and others.

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8.7

Spheres of ceramic exchange in Southeast Asia, ninth to sixteenth centuries CE

John N. Miksic and Goh Geok Yian

Introduction

Historical studies have tended to follow a path predicated on the assumption that individual units (polities, cultures, societies, ethnic groups) can best be understood as firmly bounded units relatively isolated from one another, that change within them was mainly driven by internal factors, that these units only interacted weakly with each other (except in wartime, and warfare was viewed as a zero-sum game: the winner survived and the loser vanished). Beginning in the 1980s, an expanding group of scholars has explored alternatives to this paradigm based on the idea that this assumption is incorrect, and that interaction between human groups has played a consistently important role in socio-cultural evolution.

One such paradigm was developed by Immanuel Wallerstein (1974–89) to explain why third world countries lagged behind Western nations in the post-World War II era. Wallerstein suggested that this problem stemmed from an inequitable relationship established in the sixteenth century between the core of a capitalist world-system (Europe and North America) and polities on its periphery represented by third world nations. He postulated the existence of an old world-system predicated on bulk and luxury trade, which was replaced by a new world-system linking the entire globe, based on capitalism (Wallerstein 1991).

Most scholars now acknowledge the fundamental importance of commerce, trade, and communication as alternatives to politics and warfare as a framework for understanding the long-term evolution of widely separated societies. Wallerstein's basic premises have been challenged, in particular the importance of capitalism and European expansion during the sixteenth century. World-systems theory has been in large part supplanted by concepts glossed as localization, globalization, and glocalization. Each of these concepts has contributed to the quest for a general theory which gives proper weight to the relationship between the world and localities. A focus on center–periphery relations has been replaced by a whole range of relationships between the globe, the entire human species, and the localities into which the world can be divided. This chapter attempts to fulfill some of the concepts adumbrated by Beyer (2007) and Robertson (1995), who argued that in order to be most productive and accurate, a paradigm for analyzing the history of communication and exchange needs to take into consideration the fact that the world's population is divided into subunits of different scales which interact with each other on different levels and which overlap with each other rather than forming discrete and firmly bounded entities (see also Feinman this volume; Knappett this volume; Robertson this volume). This chapter deals with networks of exchange in Asia, especially the south-eastern area of the continent, during the ninth to sixteenth centuries as defined by one item: ceramics.

The world-system and its successors

Some scholars have expanded the term "world-system" to refer to smaller geographical units and longer periods, and have stripped away its assumption of Western superiority (Frank and Gills 1993; Chase-Dunn and Hall 1997). Others "reorient" the world-system by adopting an Asia-centric vantage point in which an earlier core region in Asia (China) was (perhaps temporarily) replaced by Western Europe (Frank 1998; Abu-Lughod 1989; Wong 2000). Frank, Abu-Lughod, and Wong *et al.* demonstrated that a modified world-system theory could be utilized to discuss processes of change on multiple levels by perceiving the globe not as a unified sphere, but as a set of interconnected networks and pathways. However, the assertion that China was the core prior to the 1500s or 1800s (Frank and Abu-Lughod) does not lead to an understanding of how regions outside Europe and China fit into the system. It merely replaces one core with another, marginalizing other geographical areas, and deals with time by dividing it into two separate blocks rather than a continuous flow. It thus perpetuates the teleological implication that a particular system was predestined to rule the economies and societies of the globe.

The most problematic aspects of the world-systems model lie not in its overemphasis on the role of capitalism and the exceptionalism of Europe, but in its basic tenet that a binary system consisting of a core which exerts a hegemonic relationship over its periphery is inevitable. Not all critiques of world-system theory refute this assumption. Early forms of globalization theories suffer from a similar affliction: they divide the world into global and local units without acknowledging the existence of overlapping hierarchies (Beyer 2007: 98). Globalization theorists disagree on the date when globalization began, or even if it had a beginning (Feinman this volume; Robertson this volume). The solution to the problem lies in the use of the term globalization to designate a process (rather than an event) during which different places became increasingly connected. Most globalization theorists (e.g. Jennings 2011: 1, this volume) emphasize that interactions occur increasingly over long distances; others focus on worldwide connections, while pointing out that not all regions are equally connected (El-Ojeili and Hayden 2006: 13; Eriksen 2007: 14; Held and McGrew 2000: 3; Inda and Rosaldo 2008: 4; Ritzer 2007: 1; Tilly 1995: 1–2). Recent globalization theorists highlight the "transformative nature of expanding networks today rather than their geographical extent" (Jennings 2011: 2). The "globe" in globalization is less important. Feinman (this volume, p.43) comments that "a concern with globalization (broadly defined) entails that researchers in the social and historical sciences engage with scale and spatial variation, concepts that too often have not been deftly handled by prior paradigmatic frames in these fields."

Scholars searching for alternative names for this concept include Tomlinson (1999: 2) who proposed "global culture" to refer to "complex connectivity," "a dense network of intense interaction and interdependencies between people in different parts of the world that is created by a significant increase in the flow of information, goods, and people across cultural and geographic boundaries" (Jennings 2011: 2). This results in a "fractured, hybrid, and often contentious amalgamation of people who know that they are stuck together whether they like it or not" (Jennings 2011: 3). Other terms lend themselves to a more nuanced, neutral perspective on the subject of economic and cultural connectivity.

The term "localization" was used by O.W. Wolters (1982) in the context of Southeast Asia's relationship with South Asia to refer to the importation (one could say appropriation) of South Asian cultural traits such as a written script, Sanskrit language, architectural and artistic motifs and techniques, etc. Wolters was reacting against the idea that this process of cultural change which previous generations of scholars termed "Indianization" was a one-way transfer from South Asia to Southeast Asia, thus from a center to a periphery. He referred to the "fracturing and restating" of Indian traits by Southeast Asians, recognizing the agency of Southeast Asians in the flows of ideas and symbols.

The term "glocalization" emerged in business terminology, mainly with reference to Japan, in the 1980s to refer to the production of goods and services for many culturally and geographically diverse markets, or "micromarketing" (Robertson 1995: 28). The concept denoted by this term provides a salutary shorthand (although a rather involuted neologism) to refer to the idea that there is no such thing as a dichotomy between the global and the local; localism, the idea of a cultural configuration in any sphere, from entertainment to food to religion, perceived to belong to a particular restricted locality is in fact formed to a large extent by reference to other localisms, real or perceived. The characteristics associated with localization are, as Wolters implied and doubtless would have made explicit were he still alive, not in conflict with long-distance communication and trade, but on the contrary could not have existed without the expanded possibilities for new ways of thinking, acting, and making things provided by exposure to ideas and things outside the locality. The local and the global are locked in a dance with one another, a dance marked by "simultaneity and interpenetration" (Robertson 1995: 30). The term "glocalization" thus calls attention to the fallacies inherent in the term globalization as generally understood. The idea that globalization is synonymous with homogenization of culture was refuted even before the term actually was employed in its modern sense by thinkers such as Marshal McLuhan (1964).

The term "interaction sphere" has been used by archaeologists to refer to a complex network of interaction at different scales and periods. This chapter tries to show how this term helps to clarify problems of scale and spatial variation in archaeology. Temporal variation is another important dimension as well, but integration of these three variables would take too long to present in the limited space available here.

The interaction sphere

The concept of "interaction sphere" is useful in applying the "glocalization" concept to archaeological data. Spheres of interaction can be perceived as concentric, as subdivisions of larger spheres, and as overlapping with other spheres. They can occupy differing positions on spatial and temporal scales. The term was introduced 50 years ago but did not achieve great popularity. This is unfortunate, because this term is suitable to emphasize a hierarchy of connectivity in spatial units which crosses cultural and geographic borders. Originally applied to the large part of the central United States, where copper artifacts of a particular style and specific mortuary customs were distributed (Caldwell 1964; Struever and Houart 1972), the term can be applied to the analysis of the distribution of a special type (or types) of artifact(s) made of similar material and displaying a common style over a large area characterized by the presence of many different local art styles, settlement patterns, modes of subsistence, etc.

The term interaction sphere appears occasionally in contexts where some "form of connectivity" (the definition proposed by Robertson) is involved. Pryce *et al.* (2014) postulate the existence of a "Southeast Asian interaction sphere" at 3000 BP, within which knowledge of copper-working spread. The distribution of Dongson drums over a large expanse of Southeast Asia in the late prehistoric and early historic periods (*c.*500 BCE–500 CE) provides another example of an artifact type embodying a complex symbolic system which spread across cultural and linguistic as well as geographic boundaries. Interaction spheres need not be restricted to copper or bronze items; ceramics and statuary have also been used as criteria for defining exchange networks.

Previous scholars have proposed the existence of prehistoric and early historic interaction spheres within or larger than Southeast Asia. Solheim coined the term Nusantao Maritime Trading Network to refer to a huge area which extended over the Pacific Ocean, the South China Sea, Japan, the Bay of Bengal, the Indian Ocean, and Island Southeast Asia (Solheim 2000). Solheim defined this network's extent by reference to pottery types and ornaments called *lingling-o* and connected the network with the activities of the Nusantao maritime people and their culture (Solheim 1975: 158; 2000: 274). It is unclear whether the postulated similarities in pottery styles were due to interaction in the form of exchanges of ceramics and motifs among potters, or to the descent of isolated groups from a common ancestor. This problem will continue to plague the study of prehistoric and early historic interaction spheres until a comprehensive database of chemical characterizations of Southeast Asian earthenware pottery has been completed. This problem could be ameliorated by finds of pottery on sunken cargo ships, but the oldest trading vessel yet found in Southeast Asia dates to the period between the late third and mid-fifth centuries CE (Manguin 1993: 256). Evidence of Southeast Asian pottery as a major commodity in maritime trade only dates to the tenth century CE, as demonstrated by the Intan and Cirebon wrecks (see further below). Older data are needed to address this question with greater confidence.

McNeil and Welch (1990: 331) and Welch and McNeil (1991) demonstrated the existence of a "regional exchange network" in the late prehistoric era in the upper Mun river valley of north-east Thailand on the basis of the distribution of a type of pottery called Phimai Black Ware. They also noted Caldwell's use of the term "interaction sphere" and concluded that "The possible analogy with Mainland Southeast Asia during the first millennium BC is clear" (McNeill and Welch 1990: 336). Hung *et al.* (2007: 19745) proposed a sea-based trade network which connected Taiwan, the Philippines, East Malaysia, central and southern Vietnam, eastern Cambodia, and peninsular Thailand between 500 BCE and 500 CE. Their research suggests that raw nephrite from Fengtian, Taiwan, was imported into Southeast Asia where ornaments like *lingling-o* were manufactured. These late prehistoric/protohistoric examples provide interesting comparisons with later interaction spheres defined by ceramics.

Another recent study which has utilized the term "interaction sphere" in the context of Southeast Asian archaeology is that of Eyre (2011). In her study of Metal Age communities in the Chao Phraya valley, she discerns a number of ceramic sub-regions in an area of approximately 15,000 square kilometers (Eyre 2011: fig. 9). She makes another interesting distinction between various types of interaction spheres, including economic, prestige goods, political exchange, and information flow (Eyre 2011: 73), but it may be very difficult in practice to differentiate between them on the basis of archaeological data. One example of a "prestige goods" interaction sphere may be that described by Dalsheimer and Manguin (1998) on the basis of the distribution of mitred Vishnu statues of the fifth to early seventh centuries CE found in the lower Mekong valley and adjacent areas of south Vietnam, peninsular Thailand, south Sumatra (Bangka Island), and west Java. Noonsuk (2013) also applied to the term to the Tambralinga area of south Thailand.

The concept of sphere of interaction can be used to satisfy the exhortation of Beyer and Robertson to elucidate details of a network of communication and exchange which existed at multiple scales and linked a large proportion of the world's population during the period from about 800 to 1500. This period corresponds to two different phenomena which may possess some degree of correlation of the cause and effect variety: the beginning of mass production of glazed ceramics in China, many of which were destined for export; and the development of many new port sites along the south coast of Asia. This chapter deals with the period beginning around 800 CE, when Chinese glazed ceramics became a major new commodity. Chinese glazed ceramics are very durable and can be easily dated stylistically. The interaction spheres which can be described by studying their distribution may well have existed earlier, but this can only be confirmed if new sources of data become available. This chapter identifies interaction spheres of different scales by comparing the distribution patterns of various types of ceramics over a very large part of the ancient world: from East Africa along the south coast of Asia to China and Japan.

Ceramics as denoting interaction spheres

Ceramics are the most common source of data for the study of human culture during the past 10,000 years. Ceramics are produced and distributed on several scales, from the household to the globe. Ceramics offer the best hope of precisely reconstructing economies and societies.

Ceramics have not been as popular a subject for study in Southeast Asian archaeology as artifacts of metal and stone, or statues and temples. Until the twenty-first century, most studies of ceramics found in Southeast Asia were conducted by archaeologists trained elsewhere. This is particularly true of ceramics which postdate the ninth century. Ceramics are often examined as one among a range of material remains providing information on prehistoric sites, burials in particular, but they rarely form the principal focus of site reports. Studies devoted to ceramics from the ninth to sixteenth centuries mainly focus on collections in museums and private hands. Few are examined within archaeological contexts. Typology and classification systems for ceramics of the historic period are cursory and limited to specific sites and sub-regions. Ceramics found at temple sites are rarely described in reports. Even high-fired porcelains which have been exported from China to Southeast Asia in huge quantities over the last 1,000 years attract very little attention (except from collectors).

In Asia during the ninth through sixteenth centuries, six interaction spheres can be delineated on the basis of ceramic distribution (Figure 8.7.1). The first is defined by pottery made for domestic use. Like so much else of women's work, it has not been calculated into the world-system. It is so fundamental as to be unnoticed. The broad distribution of similar pottery over a wide area could be explained in three ways: either local earthenware pottery was traded over a wide area, or the pottery-makers all descended from a common ancestor, or the potters themselves moved. The latter explanation is least likely, since residence in Southeast Asia has been mainly matrilocal, and women are not recorded as traveling frequently over long distances. Some combination of the other two factors is probably responsible.

The second sphere is defined by one special type of earthenware termed "fine paste ware" because it has no discernible temper, and the basic material is a fine white or buff clay which seems to contain a high proportion of kaolinite. Clay of this type is rare in Southeast Asia. The oldest description of such ceramics appears in Malleret's study of sites in the lower Mekong, from the Transbassac to Angkor Borei and Long-dien (Malleret 1960: 99–100, plate 10). Stark (2006: table 1, page 101) discerned two types of fine orange wares and one type of fine buffware (including *kendi*) at Angkor Borei and assigned the latter to the period of *c.* 200/300–600 CE (?). Similar ware has been found in north-east Sumatra (Kota Cina), south-east Sumatra (Jambi), Banten Girang (west Java), Gatak (central Java), the Sarawak River delta, and Trowulan (east Java). Similar wares have also been found on the tenth-century *Intan* and *Cirebon*, the thirteenth

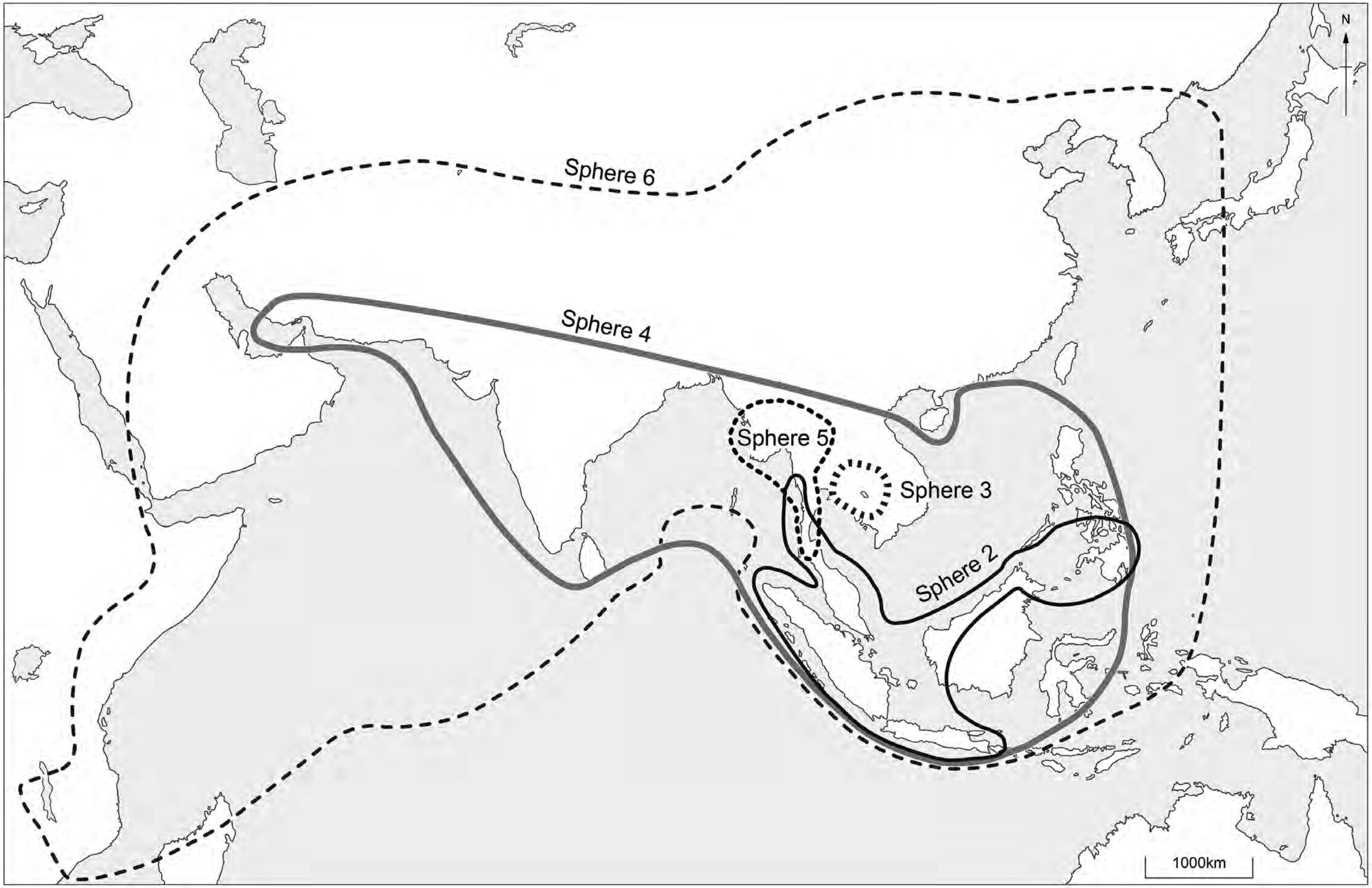

Figure 8.7.1 Ceramic interaction spheres 2-6. Sphere 1 is not shown; it includes the entire area of the map, except Australia

century *Java Sea* (see Niziolek & Respess this volume), and the *Bakau* shipwrecks in the western Java Sea. The basic form is that of a pouring vessel with a long neck, elaborately shaped rim, and decorative spout. These vessels are called *kendi* in Malay, probably derived from Sanskrit *kundika* or *kamandalu* (Khoo 1991). Such vessels are often associated with Buddhist rituals. They are still made in parts of Southeast Asia to hold drinking water. Some varieties are slipped and burnished, while others have painted stripes. A greater variety of shapes of visually similar ware is found in southern Thailand. EDXRF analysis and discoveries of kilns indicate that one center of production during the tenth through fourteenth centuries existed there (Miksic and Yap 1990, 2009; Srisuchat 2003; Stargardt 1972).

The third sphere is that of glazed pottery made in the Khmer empire. By the eleventh century, the Khmer had become the second society in the world, after China, to make glazed stoneware. Some samples found outside the empire have been identified as Khmer, but it seems unlikely that Khmer stoneware was intentionally produced for export.

The fourth sphere is composed of kiln complexes in Vietnam, Thailand, and Myanmar, where glazed ceramics were made in the fifteenth century, much or even most of which was exported to the Philippines and Indonesia. This sphere formed when Chinese policy discouraged foreign trade, and ended when Chinese policy was reversed.

The fifth sphere consists of a particular type of ceramic made in the area where the Siamo–Malay Peninsula joins the mainland. Large storage jars termed Martaban (after a corrupted pronunciation of the place name Muttama) made in this area from the sixteenth to the nineteenth centuries were praised by early European visitors. The jars were so famous that their name became a generic term for a type of storage vessel.

The sixth sphere is by far the largest and longest lasting. It extended from Japan to East Africa. It formed in the ninth century, and still exists today. It is delineated by Chinese high-fired pottery. This interaction sphere formed because of Chinese desire for exotic items and the need for a product to offer in exchange, but its effects included the employment of many workers in south and south-east China. The result was a synergy of technology, commerce, and art which yielded the first mass-produced goods aimed at a middle-class market to achieve distribution over a vast area.

The ninth century: the sixth sphere appears. Mass production and distribution begins

Ceramics do not usually figure in lists of Chinese inventions (as, for instance, Robertson this volume, quoting Fernández-Armesto 2009: 25). Porcelain's impact on the world's economy and lifestyle has been less dramatic, but no less profound, than more oft-cited inventions, and, unlike them, China's predominance in this field has never been challenged. The ceramic trade in the South Seas (the Chinese term *nanhai* denoted both the South China Sea and Indian Ocean) is not only a good proxy for the expansion of connections between Southeast Asia and China; Chinese sherds are found along the coasts of India, east Africa, and southwest Asia (Table 8.7.1). The eminent British archaeologist Mortimer Wheeler wrote that "from the +10th century onwards the buried history of Tanganyika is written in Chinese porcelain" (quoted in Needham 1970: 51).

Chinese ceramics began to be mass-produced for export in the ninth century. The *Belitung* or *Batuhitam* shipwreck sank around 832 CE and was discovered in 1999 in a cluster of islands which clogs the sea-lane between China and Java (Figure 8.7.2). Salvors recovered a significant proportion of the assemblage, including some of the finest gold and silver items ever made, large storage jars made in the province of Guangdong, which contained Chinese spices, and

Table 8.7.1 Important shipwreck sites referred to in the text

Shipwreck	*Period*	*Construction*	*Location*	*Sources*
Batuhitam	9th century	Arab dhow	north shore, Belitung island	Flecker 2000; Miksic 2013a
Intan	10th century	Southeast Asian ship	south of Belitung island	Flecker 2002; Miksic 2013a
Cirebon	late 10th century	Southeast Asian ship	160 km north-northeast of Cirebon	Bambang Budi Utomo 2008; Liebner 2010
Karawang	late 10th century	Southeast Asian ship	160 km north of Cirebon	Liebner 2010; Miksic 2013a
Java Sea	13th century	Southeast Asian ship	south of Belitung island	Mathers and Flecker 1997; Miksic 2013a
Tanjung Simpang Mangayau	14th century	Chinese ship	north tip of Borneo	Flecker 2012

60,000 smaller ceramics. The original cargo may have contained as many as 100,000 ceramic items. The most numerous type consists of bowls with polychrome designs painted under the glaze, made at Changsha in Hunan Province, hundreds of kilometers up the Yangzi River from Yangzhou, the port where they were loaded on a ship and sent on their voyage.

The discovery of this ship indicates that intensive connectivity between China and the outside world was established earlier than had been previously suspected. The discovery of a huge number of bowls of one type in one shipment implies mass production requiring a high degree of centralized organization. The transport of the ceramics on the long journey to the coast, and loading aboard the ship was another intricate part of the process. The purpose of this voyage was probably diplomatic, indicating a more elaborate set of symbolic connections than pure profit-making would have done. Changsha wares had previously been found at land sites in Southeast, South, and Southwest Asia, but without quantitative data, it was impossible to understand the economic institutions which underlay this distribution. Chinese documents on this activity do not exist. The level of industrialization and coordination indicated by the cargo of this vessel overturned basic assumptions about industrial production and social organization in ninth-century China.

This shipwreck also has major implications for two other mutually-related subjects. One of these stems from the origin of the ship. Fernández-Armesto seems to believe that shipbuilding technology was one of China's major contributions to the world. There is no foundation for this belief. The oldest evidence that any Chinese ship ventured beyond China's coastal waters dates from around 1300. The *Belitung/Batuhitam* ship was not Chinese; it was made somewhere in western Asia, probably in the Persian Gulf. It is the oldest dhow yet discovered. Mid-ninth century Arab and Persian sources allude to maritime contact with lands in the Indian Ocean and Southeast Asia. Most are tales told by sailors which are useful in illuminating the realm of possibility, but cannot be accepted as attempts to depict reality. One of these is the story of Ishaq the Jew in *The wonders of India* (*Kitab Aja'ib al-Hind*) by a Persian, Buzurg b. Shahriyar. Ishaq traded in Oman, then went to the "lands of India," then to China, and after many years returned to Oman with a ship full of Chinese silk, porcelain, and other Chinese goods. He set out on another voyage to China, but when he reached Sumatra the ruler demanded a huge fee to allow him to go to China. Ishaq refused to pay, was killed, and his ship and cargo seized

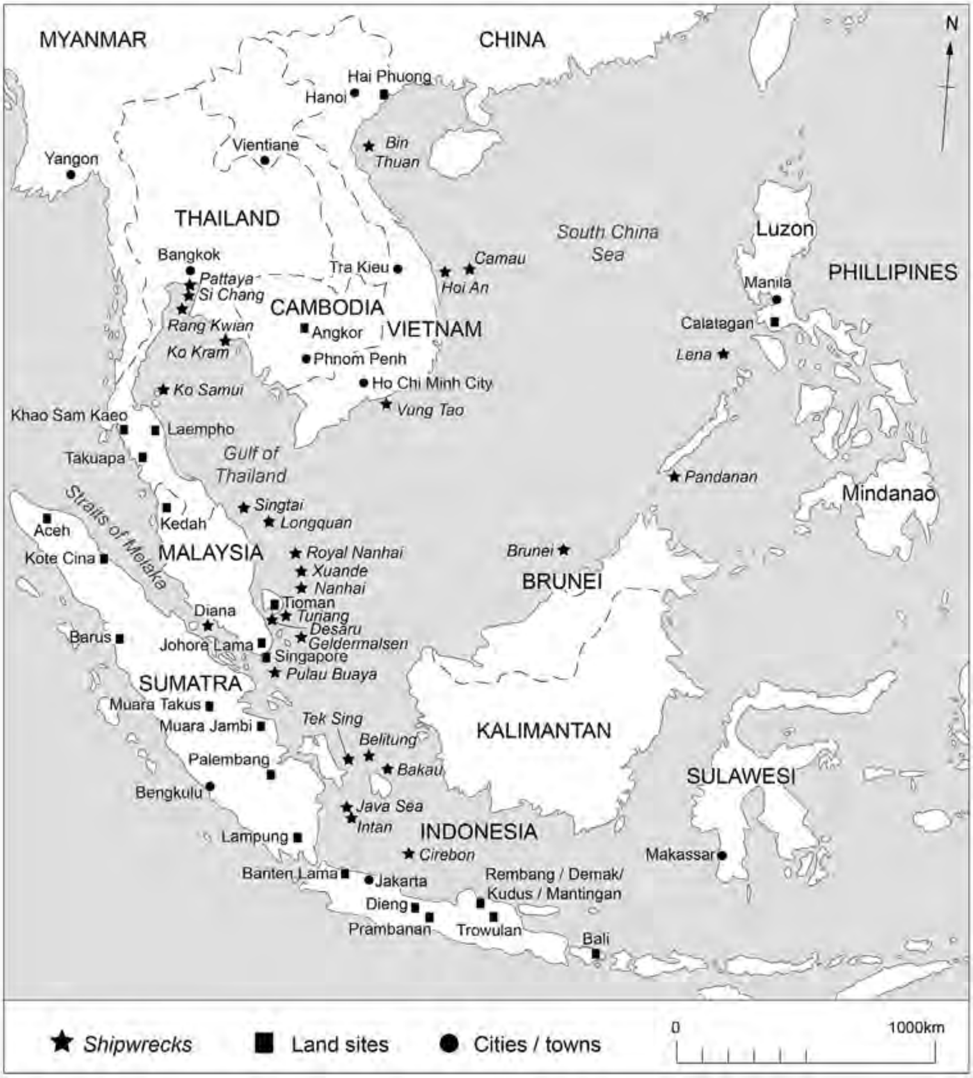

Figure 8.7.2 Shipwrecks

> Not only do the likes of his riches find no parallel in the Geniza letters, the Chinese setting is also unique. Suffice it to say that those documents do not attest the travel of Jewish traders to the Far East beyond Sumatra.
>
> *(Goitein and Friedman 2008: 123–24)*

Arab navigators of the fifteenth century were not familiar with the South China Sea (Tibbetts 1971). Unless earlier Arab sailors possessed knowledge that was later lost, it is possible that the *Belitung/Batuhitam* ship had not gone to China, but had taken on its cargo at an intermediate port in the Siamo–Malay Peninsula or Sumatra. There is evidence for this practice; the Arab geographer Mas'udi wrote in 943 CE that ships from Siraf and Oman only went as far as *Kalah* (probably the isthmus of the Malay Peninsula) and Sumatra where they met ships coming from China (Sastri 1949: 71).

The next question with important consequences concerns the ship's destination. Given the ship's origin in the Oman area, it has been suggested that the ship was on the way back there, but the ship's location on the route to Java makes this unlikely (Miksic 2013b). The Javanese kingdom of Mataram at this time was one of Asia's richest, and was in diplomatic contact with China. Sherds of Changsha ware have been found on various parts of Java (Miksic 2013a). It is most likely that the ship was bound there.

The *Belitung/Batuhitam* indicates the potential of one major discovery to integrate a host of other small pieces of information. Polychrome Changsha ware is only found in two places in China: at the production site itself, and the port of Yangzhou. Changsha polychrome was probably made for export. It would have been foolish to suggest such a complex organization of production and trade in the absence of a *Belitung*-like site, but now it is possible to date the inception of large-scale production of a commodity in China for an export market to the ninth century. The *Belitung* was a very unusual ship, not typical of the vessels or cargoes of early traders. Probably the *Belitung* was carrying diplomatic gifts to Java as part of the "tributary trade" system, about which more will be said below.

Discoveries of tenth-century shipwrecks confirm the inference that the great majority of Asian shipping was conducted in Southeast Asian vessels. The cargo of the *Intan,* found not far from the *Belitung* in 1997, consisted of less-valuable materials: mass-produced Chinese iron objects, mainly frying pans and machetes, and tin ingots which probably came from the Malay Peninsula or the islands off south Sumatra where tin is plentiful. Other metal objects included 80 silver ingots with Chinese inscriptions. On top of the metal objects were at least 20,000 Chinese ceramics. Also in the cargo were earthenware ceremonial ewers from southern Thailand. Other artifacts probably from Sumatra consisted of a wide range of bronze items. The cargo contains ceramics from a number of different spheres of exchange. There are high-quality Chinese porcelains and specially-made earthenwares from south Thailand. There are also a few amphorae of Southwest Asian origin, which were of value as containers rather than commodities. Chinese coins on board indicate a probable date for sinking around 930 CE (Flecker 2002). Other recent discoveries of shipwrecks dating from around 1000 CE such as the *Cirebon* and *Karawang* fit into a similar pattern.

Over 150,000 items were recovered from the *Cirebon*; over 250,000 sherds were studied but redeposited on the seabed due to the lack of storage facilities on land. It is estimated that the ship originally carried 250,000 ceramics (Bambang Budi Utomo 2008); the population of Java at this time is estimated at only two million. Careful plotting of items on the site yielded the conclusion that the cargo was under the control of a single merchant or authority, not stowed according to bundles or holds allocated to individual traders, which is how maritime trade in Southeast Asia was thought to have been organized (Liebner 2010: 44). The distribution pattern could also be explained if each merchant dealt only in one type of commodity, but this is unlikely. Perhaps like the *Belitung,* the *Cirebon* was not on a commercial voyage; it may have been involved in the "tributary trade." According to Wong (1979: no pagination), however, only one source mentions porcelain among the diplomatic gifts sent abroad during the Song Dynasty. Apparently porcelain was considered a commodity rather than a luxury fit for diplomatic gifts. This casts doubt on the theory that the *Cirebon* was on a diplomatic rather than commercial voyage.

By the end of the tenth century, the Straits of Melaka had been a major thoroughfare of trade for a millennium. Most of this trade was carried on boats made and crewed by Malayo-Polynesians. Their peregrinations were probably due not to a desire to accumulate wealth, but to obtain prestige by bringing back rare and exotic items as status symbols in a society without hereditary ranks (Miksic 1986). During the seventh and eighth centuries, trade in the western Malayo-Polynesian area was probably controlled by the rulers of Srivijaya, who claimed the right to extract tolls from passing ships (as in the case of Ishaq the unfortunate Jew). These missions were dispatched by local rulers with two objectives: to obtain Chinese recognition as legitimate rulers in their domains, and to obtain rights to trade in China. There was no bargaining involved; foreign envoys were allowed to bring in a certain amount of goods, of which the imperial family had the first choice. Thereafter a designated group of Chinese was allowed to conducted exchanges with the envoys in the foreign quarter where the foreigners were confined, at stipulated equivalencies. This is how the system was supposed to work; in practice, it seems that some unregulated trade did take place (Miksic 2013a).

The turn of the millennium marked a shift in trade with China. As nomads made inroads, the government began to disregard Confucian rules against trade in order to obtain revenue from taxation to support the war effort. Although quantitative data is scarce, anecdotal information suggests that the Song Dynasty "may be deemed the first period of great oceanic trade in the history of the world" (Ma 1971: 23). The Chinese government began to offer incentives for maritime trade. Chinese who induced foreigners to bring cargoes yielding duties of 50,000 strings were offered official rank. In 1115 the government established a hostel at Quanzhou for foreigners. In 1132 another hostel was founded at Guangzhou. Foreign traders began to obtain access to wider markets in China. Before 1104, merchants could only sell their goods in the prefecture where they came into the country. This rule proved to be unenforceable, so merchants were allowed to sell their goods in other areas as long as they obtained a permit from the Bureau of Maritime Commerce (Sen 1996: 257).

The early Song government attempted unsuccessfully to enforce an imperial monopoly of eight kinds of goods (Ma 1971: 37–38), almost all of which were imports from the South Seas. One of China's major problems during this period was an imbalance of trade. Even with the large amount of ceramics exported, China still experienced a drain of metal to Southeast Asia. In 1074 an official complained that foreign ships leaving China were so full of Chinese coins that "the currency was drained off like the waters of the sea into the *wei-lu*" ["rear gate"] (Rockhill 1914: 422). In the mid-twelfth century, Chinese smugglers paid for foreign goods with gold, silver, iron, and especially copper cash. The Superintendent of Foreign Trade was supposed to inspect outgoing ships to make sure that they did not carry away forbidden items including coins and other bronze objects, gold and silver, and other strategic items (Sen 1996: 257). In 1222 China passed a law making it illegal to buy foreign goods with money. Instead Chinese were encouraged to barter local products like silk, lacquer, and porcelain for imports. This regulation spurred porcelain production in Guangdong. Zhu Yu wrote that "The people of Guangzhou take out loans to hire ships to sail afar, offering to pay 100 per cent interest. . . . The rich availed themselves of this opportunity to stock up on silks and pottery and sold these at inflated prices" (Yang 1985: 27). Huge kiln complexes were built in south coastal areas to service export demand. Poorer areas where land was not particularly fertile found the ceramic industry an important new source of employment; Southeast Asian demand for manufactured goods provided an important stimulus to the economy of south-east China.

One of the beneficiaries of the status of approved port of trade was the local ceramic industry. According to the *Tao zhi luo* by Jiang Qi, 1322, potters were not paid. Instead they were given land to cultivate. They lived near factories and only came to the kilns at certain times. According to Jiang Qi, "The different kinds [of pottery] have all to be selected to please the fancy of the consumer of each district." It has been estimated that 100,000 people, or 10 percent of the population of the Minnan region of Fujian, worked in the ceramic industry in the thirteenth century (Peter Lam, personal communication). *Pingzhou Ketan*, written during the

Song Dynasty, describes a ship being readied to sail to the South Seas: "The greater part of the cargo consists of pottery, the small pieces packed in the larger, till there is not a crevice left" (Yang 1985: 26). Wang Dayuan, a Chinese trader of the early fourteenth century who made two voyages to Southeast Asia, gave careful descriptions of the types of porcelain and other Chinese goods which were sellable at each port. Traders of this period had to take local taste into account (Rockhill 1914).

We have no information on prices of ceramics until the Yuan. Marco Polo described Dehua porcelain cups as inexpensive, claiming that a Venetian groat could purchase eight of them. Four blue and white ceramics are mentioned in *Ming Hui Dian*: a plate which cost 500 *guan*; a bowl, 300 *guan*; a vase at 500 *guan*; and a wine jar, 500 *guan*. In 1368, gold was worth 400 *guan* per *tael* (1/16 of a *kati*). If a *kati* was about 600 grams, then a *tael* would have been 37.5 grams. A gram of gold would have cost about 16 *guan*. The drain of bronze coinage may have raised the price of silver in China. In 1189 the export of silver was banned (von Glahn 2004: 175). Nevertheless Chinese silver ingots, some with official stamps on them, have been found on Southeast Asian shipwrecks of this period, and in Bahrain as well (Schottenhammer 2001: 136).

In 1126 nomads conquered north China, but Chinese trade expanded, partly in order to secure additional revenue. In 1128 maritime trade yielded customs duties of two million strings of cash, 20 percent of the government's entire revenue (Tan 2005: 232). In 1137 Emperor Gaozong declared that "The profits from maritime commerce are very great. If properly managed, they can bring a million (strings of cash). Is this not better than taxing the people?" (Ma 1971: 34). Revolutionary changes were introduced after the southward retreat. Chinese were encouraged to go overseas to trade. The maritime trade system in the South Seas (Southeast Asia and the Indian Ocean) fell into abeyance. Trade was separated from diplomacy. "By the twelfth century no Malay port depended for its fortunes on the Chinese tributary trade" (Wolters 1975: 1). The decline of the tribute system and the appearance of Chinese merchants had a significant impact on the kingdoms of the South Seas. These changes did not cause economic hardship; the reverse occurred. Many new ports appeared along the Straits of Melaka, marked by abundant sherds of porcelain. This increased wealth was more widely distributed than before because more ports were in direct contact with China. The complexity of maritime trade in the late Song Dynasty is illustrated by a list of 339 imported items in a Chinese inventory of 1141 (Wheatley 1959: 31).

The oldest Chinese-built ship found outside Chinese waters has been found off the north tip of Borneo. Most of the cargo had been looted. A total of 303 intact ceramic artifacts were however recovered, as well as 250 kilograms of sherds (Sjostrand *et al.* 2006: 111). Those authors estimate the date of the artifacts as Northern Song (960–1126), whereas Flecker (2012: 27) prefers Southern Song (1127–1279). Flecker confirms that the ship is of Chinese construction. It is extremely unfortunate that the oldest Chinese ship found in Southeast Asia was almost completely destroyed before details of its size, design, and lading could be ascertained.

The Fringe of Sphere Six: Cambodia and Myanmar

During the tenth to thirteenth centuries, Southeast Asian societies evolved in two different directions. The mainland was dominated by two empires, Bagan in Myanmar and Angkor in Cambodia. By the tenth century, both empires had abolished coinage and implemented highly centralized planned economies based on governmental control over labor and agricultural surpluses. Foreign trade played little part in these kingdoms. To date, research in both countries gives little evidence that the quantities of Chinese ceramics found at these mainland sites match the volumes of Chinese wares found in Indonesia and other parts of Island Southeast Asia.

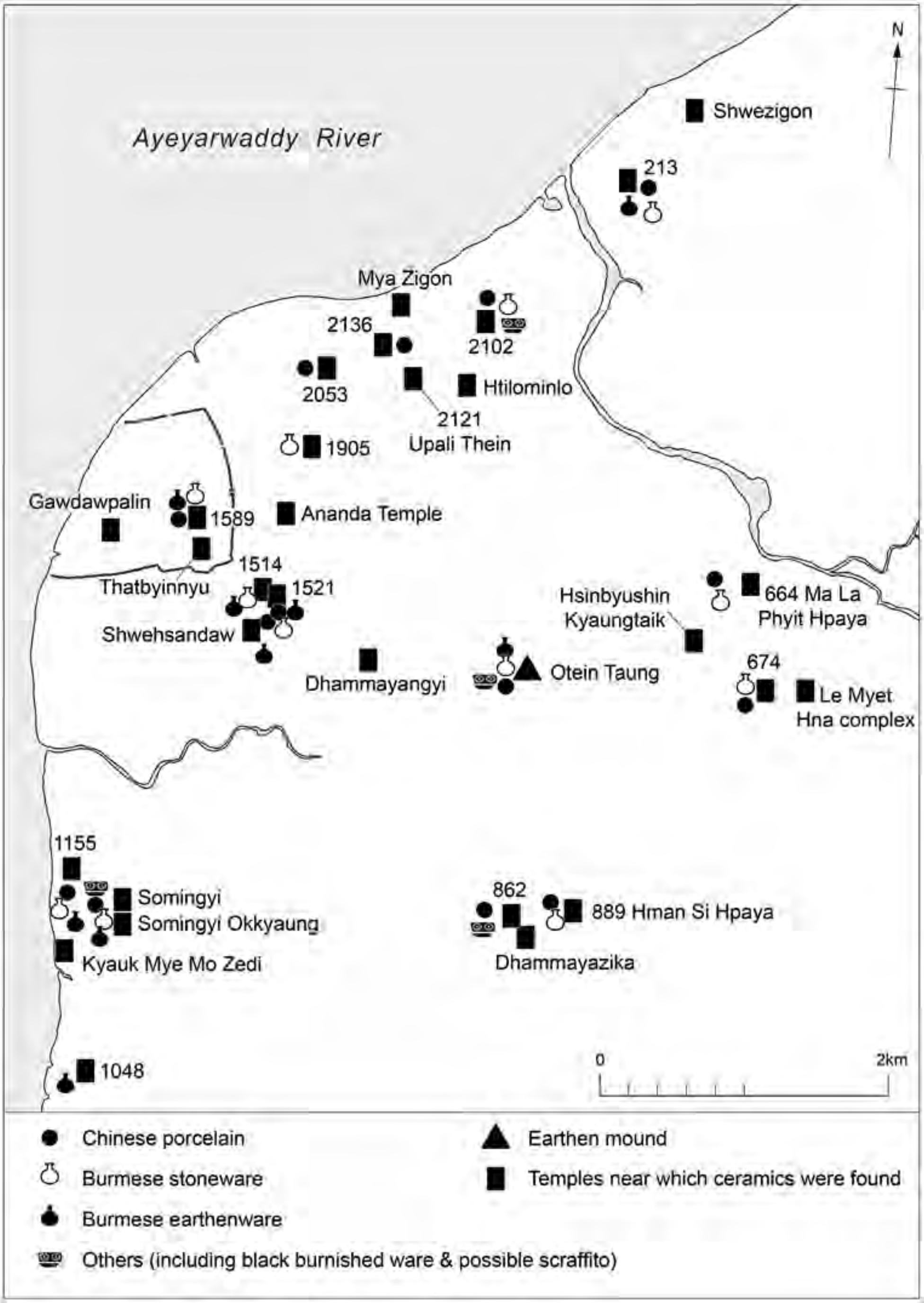

Figure 8.7.3 Distribution of finds in Bagan

Most scholars (see Aung-Thwin and Stark 2001 special issue on Myanmar in *Asian Perspectives* 2001) view Bagan as a centralized agrarian polity. While the presence of Chinese porcelain at Bagan does not necessarily indicate trade, the range of Chinese porcelain found in a survey, as well as the distribution of these artifacts (Figure 8.7.3), suggest that at least some of them were acquired commercially. In addition to the Chinese ceramics, other imported wares were also found including a Persian sherd and Thai glazed stoneware. Analysis of sherds from the excavations of the Anawrahta and Kyanzittha palace sites yielded good quality green, white, and blue and white porcelain. That Chinese porcelain was found within the palace complex and both within and outside the "city" wall suggests that this type of artifact was not limited to the "tributary" interaction sphere (Goh, forthcoming).

A Khmer inscription from 968 to 984 mentions that the treasury contained three Chinese drinking cups (Coedès 1952: 108). A member of a mission to Angkor in 1297, Zhou Daguan, left the most detailed surviving description of ancient Angkor. His mission was not mainly concerned with trade; Cambodia was not an important trading country. Still, Zhou (2001: 63) gives some basic commercial information about Chinese goods wanted by Cambodians, which included gold, silver, and porcelain. Chinese ceramics have been discovered at several sites around Angkor, but little information regarding their types, distribution, or frequency has been published. In this respect, Angkor is not unusual. Little quantitative data on the distribution of early Chinese ceramics is available for any sites in Southeast Asia. In the most comprehensive study to date, Marie-France Dupoizat (1999) studied sherds collected from the Royal Palace site. She found nothing older than the tenth century. There was a large quantity of imported wares (about 10 percent of the entire ceramic assemblage), most of which are Chinese. White covered boxes predominated, a pattern found at no other Southeast Asian sites. This pattern is confirmed by other excavations (Nakagawa 2000: 361). According to B.-P. Groslier, by the fourteenth century, 80 percent of the ceramics from the palace complex were Chinese (Groslier, in Brown 1977: 35), but this figure has been disputed; it may have been much less, perhaps 80 percent of the *glazed* ceramics from the site (Cremin 2006: 121). The proportion of Chinese ceramics relative to Khmer pottery in excavations at the Royal Palace site, Angkor, between 1995 and 1998 is about 10 percent (Cremin 2006: 123).

Archaeological research confirms that much more Chinese porcelain was sent to insular Southeast Asia than to the mainland. Locally produced ceramics were in high demand in Cambodia. In insular Southeast Asia, Chinese wares were widely distributed among the general population during the twelfth and thirteenth centuries, but in Cambodia they seem to have been restricted to the upper class and religious complexes. After the decline of Angkor in the fourteenth century, Chinese ceramics became more widely available. The discovery of Chinese and Thai ceramics in jar burial sites of the mid-fifteenth century in the Cardamom Mountains suggests that by then the highly centralized economy which Angkor had imposed had broken down (Miksic *et al.* no date).

We would like to know how the long-distance maritime trade network articulated with the local distribution system, but neither Javanese nor Chinese sources provide answers to such questions. Porcelain is the only important commodity for which distributional data is available in premodern Java, and only one regional study has so far been conducted (Orsoy de Flines 1941–47). By the eleventh century imported pottery in north-central Java was distributed in an integrated marketing system. This pattern contrasts with that so far detected for the Tang dynasty in south-central Java; most Chinese porcelain there is associated with temples. Much

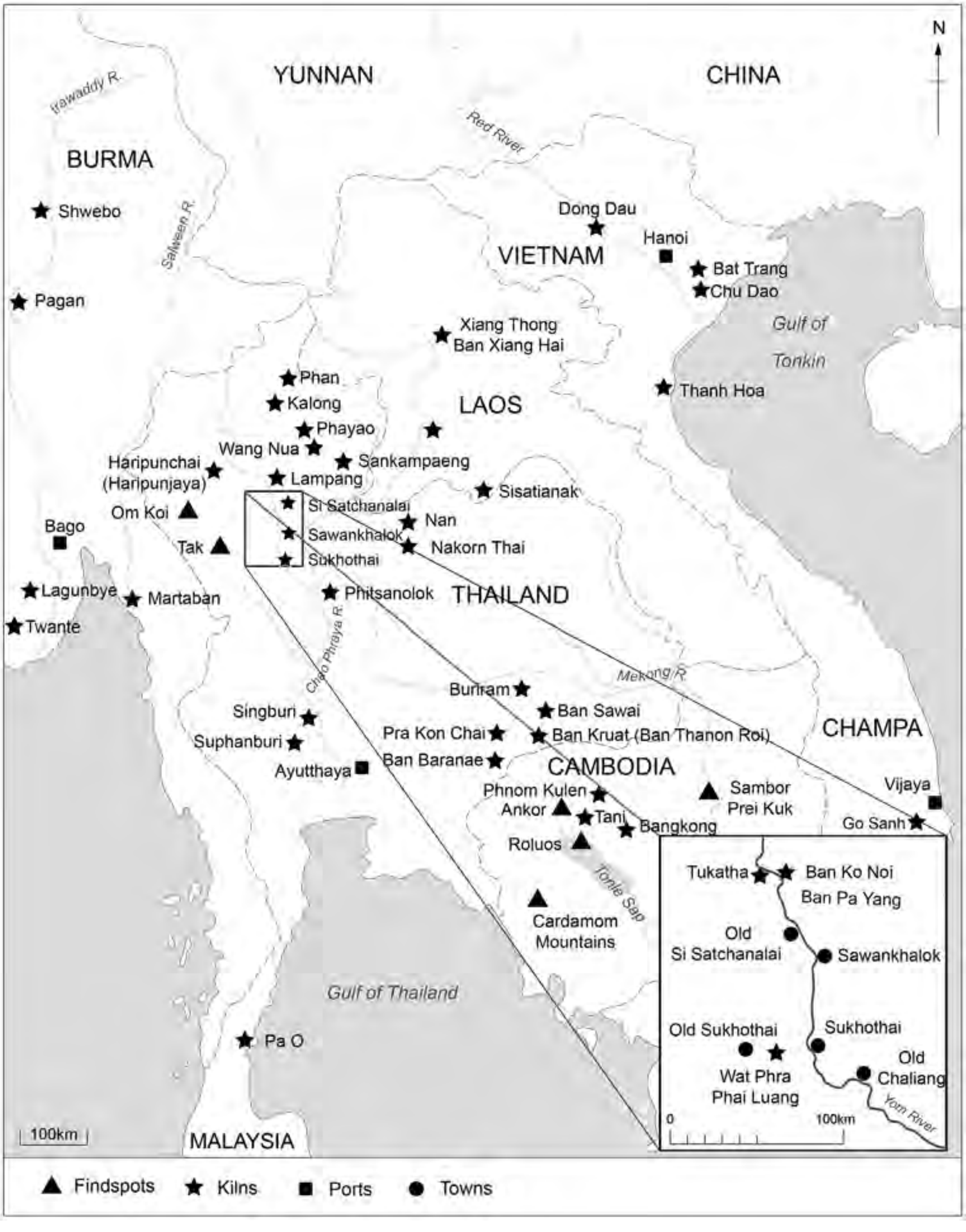

Figure 8.7.4 Map of Mainland Southeast Asia kilns and ports

more information on the distribution of Chinese imports in Southeast Asian sites is needed before the impact of Chinese involvement in maritime trade on Southeast Asian societies and economies can be disentangled from other aspects of life which were evolving at the same time.

By the thirteenth century, Chinese ceramics comprised 30 percent of the total ceramic assemblage at a port site in northeast Sumatra (Miksic 1979). By the fourteenth century, Chinese ceramics comprised 50 percent of the sherds (by number) from Singapore (Miksic 2013a).

Singapore is worthy of note because it is the first port for which we have written documentation that Chinese were residing there (Miksic 2013a). At the end of the Yuan Dynasty, the south Chinese trade network was destroyed. The economic policy of the next dynasty, the Ming, ensured that South Chinese ports took centuries to regain the prosperity and importance they had attained during the tenth to fourteenth centuries. The Ming emperors instated draconian prohibitions against foreign trade which were only lifted in 1567. This situation is clearly reflected in the ceramic record. A period called the "Ming gap" ensued, during which Vietnamese and Thai ceramics assumed the position previously occupied by Chinese wares (Brown 2009). This slowdown in the Chinese ceramic trade contributed to the upturn in the ceramic trade which emanated from three countries within Sphere 4: Thailand, Vietnam, and Myanmar (Figure 8.7.4).

Sphere four: Thai, Vietnamese and Myanmar ceramics, fifteenth century

The first Ming emperor sought to reinstate the old tributary trade system. The third emperor, Yongle, sent impressive fleets all the way to east Africa to show the Chinese flag and to gather tribute, thus sparing the foreigners the trouble of going to China, and sparing the Chinese the cultural pollution brought by foreigners. After the fourth emperor sent one last fleet abroad, China closed her doors for 70 years. The supply of Chinese porcelain in Southeast Asia almost completely dried up, creating the "Ming gap" in archaeology. This gap provided an excellent opportunity for ceramic producers on the Southeast Asian mainland (Brown 2009). Thais and Vietnamese were the major beneficiaries of this opportunity, though Burmese and Chams also made brief forays into the market. In the early sixteenth century ceramics began to flow out of China again. This brought an end to the prosperity of the Southeast Asian ceramic exporters.

Vietnamese export ceramics

Good relations existed between Vietnam and Java in 1365, according to the Javanese text *Nagarakrtagama*. A special zone for traders from Indonesia and Siam was established on Van Don Island in 1149; it was closed in 1485 (Taylor 1982: 21). This commercial relationship predated the trade in ceramics, but it provided a convenient channel for this commodity when in the late fourteenth century Chinese pottery was suddenly difficult to obtain. Although Roxanna Brown postulated that the export of Vietnamese ceramics may have begun by the late thirteenth century (Brown 1977: 14), fourteenth-century sites such as Fort Canning lack any examples, whereas fifteenth-century sites in Singapore such as Empress Place do yield remains of this ware. A famous cobalt blue decorated vase made in Vietnam bearing a date of 1450 which at some point reached the Topkapi Sarayi in Istanbul indicates the range over which Vietnamese pottery traveled. Other examples have been found at widely dispersed sites from Fostat, Egypt (Brown 1977: 20), eastern Indonesia, and at Sukhothai, Thailand (Brown 1977: 25, footnote 20). The Portuguese author Tomé Pires in 1515 observed that at Tonkin was "porcelain and pottery – some of great value" (Cortesão 1944: I, 115).

Vietnamese wares have been found on many shipwrecks of the fifteenth century. Roxanna Brown detected two different phases during which Vietnamese ceramics were exported in large quantities: the early Ming reigns of Hongwu and Yongle (1368–1424) and the Hongzi reign up to the Portuguese conquest of Melaka (1470–1510) (Brown 2004: 7). On land, Vietnamese sherds have been reported from a large number of sites of the fifteenth and sixteenth centuries. John Guy's Gazetteer (Guy 1987, partly updated in Guy 1997: 48), lists 19 sites in Indonesia and Malaysia (increased to 25 in 1997) with Vietnamese ceramics of the fifteenth and sixteenth centuries. In the Philippines, Vietnamese ceramics comprise only 2–4 percent of foreign ceramics of the fifteenth–sixteenth centuries, whereas Thai ware of the same period comprises 20–40 percent (Brown 1977: 27). In east Java, by contrast, Vietnamese artifacts outnumber Thai, though no quantitative data is available from any sites there. The *Nagarakrtagama* mentions merchants who came to Java from Annam and Siam, as well as India, Cambodia, and China.

Discoveries at the site of Majapahit's capital in east Java, Trowulan, include many varieties of Vietnamese ceramics (Miksic and Kamei 2010). In addition to containers, which may have been made for general markets, some artifacts were made specifically for the east Javanese court, specifically glazed wall tiles. The oldest use of glazed ceramics to decorate walls of sacred buildings in Southeast Asia is attested for Bagan, perhaps as early as the eleventh century. Islamic buildings in central Asia were also decorated with glazed tiles. It is possible that these were known to the Javanese of the fourteenth century. The original source of inspiration may well have been carved wood, as Guy suggests.

Cham exports

Potters of the Cham group, speakers of a Malayo-Polynesian language from south Vietnam, benefited from the fifteenth-century Ming ban on ceramic exports as did the Thai, Burmese, and Vietnamese. The ceramic cargo of one ship, the *Pandanan*, found in the south Philippines, was almost entirely composed of Cham celadon (Diem 1998–2001; Dizon 1996). Others have been reported from Kampong Juara, Tioman Island; a number of sites in the Philippines (Champa and the Philippines seem to have had a close relationship in the eleventh and twelfth centuries), the north coast of Borneo, and Banten Girang in West Java (Aoyagi 2002). More Cham wares may yet be identified among the sherds found in other fifteenth-century sites in Java and Sumatra where Vietnamese and Thai wares have been found. Shipwreck sites with Cham wares belong to a brief period between 1450 and 1475 (Brown 2009: 7), but further research may yield evidence for a longer period of export.

Thai ceramics

It is possible that many fifteenth-century Thai ceramics were designed to conform to the tastes of the Indonesian customers (Shaw 1981: 73). Although the chronology of Thai ceramics has been clarified by shipwreck discoveries, Roxanna Brown still held out the possibility that Southeast Asian ceramics were exported before the Ming ban was announced. It is possible that some Thai and Vietnamese pieces found their way into the archipelago before 1370, but economically the quantity cannot have been significant. Thai exports came principally from the kilns of Sawankhalok (Si Satchanalai) and Sukhothai, with some large storage jars from Suphanburi. Sankampaeng plates from the early Ming period were found on the shipwrecks of Rang Kwien and Song Doc (Brown 2004: 9).

Thai ceramics were the most popular among the ceramics produced by the various nations on the mainland competing for the market in island Southeast Asia; more Thai ceramics than Vietnamese are found on shipwrecks discovered in the Gulf of Thailand. We have only indirect data from the many looted burials in South Sulawesi, but the available information suggests that Chinese ceramics represented 75 percent of the supply, Sawankhalok about 17 percent, Sukhothai about 3 percent, and Vietnamese perhaps 5 percent (Guy 1990: 63). In other sites such as Trowulan in east Java, although data is even less reliable than that for Sulawesi, Vietnamese sherds outnumber those from Thailand. This indicates that shipwrecks are not representative of the overall situation; there was regional variation in preferences. Thai ware was more popular in some areas such as Sulawesi, while Vietnamese was favored in Java. One possibility is that Vietnamese ware, which more closely resembled Chinese styles, was more highly valuable in urban markets such as Trowulan, the capital of a great kingdom, whereas Thai ceramics may have been less expensive, or had more aesthetic appeal to provincial markets such as south Sulawesi, which was a stopover on the way from Java to the Spice Islands of Maluku. In the Philippines, Sawankhalok ceramics are found in large numbers at certain fourteenth–fifteenth century sites such as Calatagan (Fox 1959). On mainland Southeast Asia, Thai ceramics from Sawankhalok have been found at Angkor. Whereas Vietnamese ceramics seem to have been exported in two distinct periods, separated by a gap of some years, Thai ceramics seem to have been exported more or less uninterruptedly from around 1400 until the late sixteenth century. Roxanna Brown believed that Sawankhalok kilns continued to produce until about 1584 (Brown 2009: 7).

Burmese ceramic exports

Burmese ceramics were exported to Indonesia, at least for a few decades from 1470 to about 1505 (Brown 2004: 7–8). Research at Burmese kiln sites has shown that celadon plates from shipwrecks of the Hongzhi period are Burmese rather than Thai. They actually seem to displace Thai celadon plates at this time. Examples have been reported from Aceh, north Sumatra. Burmese ceramics appear in Bengkulu, southwest Sumatra, and Singapore, in seventeenth-century contexts. These are large plates with dark red bodies and watery white glaze, probably made from tin or lead. The probable production sites for these are either Shwebo or somewhere in the Shan area, but this remains to be confirmed.

The sixth sphere reinstated: the Late Ming dynasty (1500–1643) and Early Qing export ware

The renewal of overseas Chinese trade after 1567 had interesting effects on the ceramic industry. Vietnamese and Thai wares disappear almost completely from the overseas markets, although some storage jars from Thailand and Vietnam continued to be used for shipping other commodities. A second effect was the development of new types of ceramics in China. During the Song-Yuan period, some of finest and most original Chinese wares were shipped to Southeast Asia. We have little information about the internal distribution of the ceramics from kilns where export wares were produced within China, so it is not possible to compare the styles and quality with those meant for the domestic versus the foreign markets. It has been assumed that "export wares" were of lower quality and intended for the foreign consumers, who were presumably less discerning than Chinese. Research during the last 40 years has shown that the reality is considerably more complex than this. During the later Ming, Chinese ceramics became much cheaper as mass production techniques were refined. Mass production made ceramics with desirable qualities such as non-porous, gleaming surfaces, and bodies which rang when struck, available for everyday use by vast numbers of people. A side effect was that many levels of aesthetic quality and durability appeared. Whether it is accurate to call these "export wares" is still in doubt, since it is quite possible that Chinese consumers in villages may have used wares of similar quality to those found in villages in Java or the Philippines.

Certain Chinese kilns of the late Ming, including some of the largest, did produce mainly for foreign customers. One of the more famous types termed Swatow ware was made in Zhangzhou, far southern Fujian. In addition to Zhangzhou ware, a multiplicity of other wares reached Southeast Asia during the late sixteenth to late seventeenth centuries. The products of the "folk" (i.e. non-official) kilns of Jingdezhen, particularly those of the Wanli period, are found in many sites in Southeast Asia, as are the ceramics termed *Kraak*. This word, which of course gave us our English word "crockery," derives from the name for a type of Portuguese ship, *caraca*. The first phase of this style of blue and white ceramics may have begun production as early as 1565, but in the second phase, roughly between 1600 and 1650, it attained a kind a kind of classic form. *Kraak* ware reached the high point of its popularity around 1615. The turmoil associated with the end of the Ming Dynasty led to the demise of the ware by 1657 (Rinaldi 1989: 62).

Sphere five: Martaban (Myanmar)

Martaban was an important sixteenth–seventeenth-century entrepôt for Chinese products in transit to the West (Brown 1988: 1), and was also reputedly the port from which large stoneware jars, known as Martabans were shipped to India and other areas. A Burmese inscription of 1291 describes the thirteenth-century Queen of Bagan ordering pots from the Tala (Twante) area (Luce 1969–70: 20, footnote 61, quoted in Gutman 2002: 110). A few black-glazed stoneware sherds have been found in Bagan, but the majority of locally produced glazed stoneware sherds were green. One example of a large Martaban jar sherd was identified in the collection of artifacts excavated from the Anawrahta and Kyanzittha palace, no firm conclusion can be drawn at this stage of the project.

Martaban became a generic name given to large stoneware jars which were made in Thailand, China, and Myanmar (Gutman 2002: 112). The fourteenth-century traveler Ibn Battuta (1853–58) referred to "Martabans or huge jars, filled with pepper, citron, and mango, all prepared with salt, as for a sea voyage." Yule and Burnell (1968) cite a reference in Les Mille et Une Nuits to "un grand basin de Martabani." Martaban continued to be an important site from the fifteenth through the seventeenth centuries, and Martaban jars represented an important commodity, mainly used for storage. The jars were a major ware sought after in the Indian markets; Linschoten recorded that many of the jars were taken to India and used in every house (Burnell 1885: 101–03). Portuguese voyagers "use them for their shippe [that sayle] to India" (Burnell 1885: 101–03). Schouten described Peguans taking "gold, rubies, musk, tin and Martaban jars into Malacca" (Meilink-Roelofsz 1962: 138; Ikuta 1977: 55–67; Gutman 2002: 113).

Exports of Southeast Asian ceramics beyond Southeast Asia

Thai wares have been found in fifteenth-century sites on the island of Okinawa. During the half-century of early Ming isolationism, from roughly 1435 to 1487, the Ryukyu Islands formed an independent kingdom which functioned as an intermediary between China and Southeast Asia. From Okinawa, some Southeast Asian ceramics were shipped to the main islands of Japan. These included large stoneware jars from Suphanburi and Martaban, but also underglaze blue and black decorated ware from Vietnam. Fragments of Vietnamese bowls have been found on Kyushu and Okinawa (Guy 1982: 29–30). The dearth of Vietnamese wares relative to those of Thailand is statistically significant, and probably reflects consumer preference, although there may be some connection with the nature of the trading networks themselves. Southeast Asian wares were exported across the Indian Ocean, to Julfar in Ra's al-Khaimah, United Arab Emirates, and to al-Tūr on the Sinai Peninsula, Egypt (Aoyagi 2002: 8). The site of Julfar yielded a range of Asian sherds, the majority of which were Chinese, mainly of the late Ming Dynasty.

The presence of only a dozen Chinese fifteenth-century sherds suggested that the Ming ban on exports had an effect here. Julfar also yielded an appreciable quantity of Thai celadon (103 sherds) and five sherds decorated with underglaze black. A small quantity of Vietnamese sherds was also found there (Hansman 1985: 43).

Conclusion

Jennings' characterization of a "fractured, hybrid, and often contentious amalgamation of people who know that they are stuck together whether they like it or not" (2011: 3) is perhaps best captured in the complex manner in which these interaction spheres of ceramic exchanges were linked. The spheres coexisted, seemingly autonomous and independent, but their sustainability over the *longue durée* was partly predicated on their interdependence. Utilitarian wares continued to be used over time as societies took on more complex configurations with certain new roles assumed by imported and higher-quality ceramics, such as Chinese ware from the ninth century. The lapses such as the Ming ban on export of Chinese ceramics were filled by the supply of Thai, Vietnamese and Burmese wares. Another apt analogy is Abu-Lughod's idea of interlocking world-systems (I–VIII) which emphasizes the importance of certain nodes within these systems rather than their boundaries. The nodes were important capital and port cities which connected these systems via sea and land trade routes. These interaction spheres are similarly linking different ceramic types and their exchange systems via nodes shared by overlapping or touching neighboring spheres. This interaction sphere model differs from Abu-Lughod's in one important point: the recognition of an overarching sphere between the ninth and sixteenth centuries which is the sixth sphere marked by Chinese ceramics.

This chapter has concentrated on the distribution of Chinese ceramics, and its relationship with other, smaller spheres of ceramic exchange as evidence of a dynamic system of early connectivity on various levels over a great span of time and space. The idea of interaction spheres deserves more attention as a means of allaying the criticisms of the world-system model. The application of the interaction sphere concept to ceramics makes it possible to fulfil the prescriptions of globalization and glocalization theorists for depicting relationships between the macro-, micro-, as well as intermediate, the complementary rather than oppositional nature of these relations, the development of spheres as a process rather than an event, and the overlapping rather than discrete nature of the units of analysis and interpretation.

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Part IX

West Asia

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9.1

Globalizing ideas in West Asian material history

Tamar Hodos

West Asia is a vast geographic territory that extends from the Bosphorus to the Iranian plateau, across the Arabian peninsula, down to the Sinai, and up to the Southern Caucasus. Its sociocultural history encompasses diverse peoples and groups, each with fluid settlement and impact boundaries over their respective floruits. Although cultures and empires from this region have emerged and declined, connectivity networks remain an important facet of their successful dissemination of ideas, instructions, individuals, and influence. These networks and their impacts upon the human experience extend from as early as the spread of agricultural techniques out of the Fertile Crescent to today's development of the Saadiyat Cultural District in Abu Dhabi. They can be characterized at various times as globalization.

One of the earliest well-known examples occurred during the Uruk period of the late fifth to late fourth millennia BCE, originally analysed as an early world system (e.g. Algaze 1993; Stein 1999). During the fourth millennium at Uruk itself, there is substantial evidence of extensive urbanization, increased status differences, craft specialization and long-distance exchange. World-systems scholars have argued that the spread of Uruk artefacts was the result of colonial expansion that established a world system, with raw materials imported from the periphery, and finished products exchanged in return. This interpretation has been criticized, however, based on temporal and spatial variability: in some places outposts can be identified, other sites show strong evidence of cultural hybrid developments, and yet others still seem to reject Uruk culture altogether (e.g. Frangipane 2001; 2002; Oates and Oates 2004; Rothman 2004; Ur 2010).

These views have been rehabilitated within a globalization interpretation by Jennings (2011: 57–76). He argues that Uruk's rapid urbanization during the early fourth millennium demanded new exchange networks that expanded into the mountains and northern Mesopotamia. Through these, goods, people and ideas came to and from the city. Uruk's own sophisticated bureaucratic mechanisms had to be understood by those who wished to participate in and benefit from Uruk's expansion, so communities began to utilize features similarly. Bevel-rim bowls, the Uruk cultural influence ceramic marker, became ubiquitous from the Zagros Mountains to Pakistan's coast. Their widespread use indicates labour organization changes to a rationed payment system. Other Uruk ideas, such as the use of Uruk cylinder seals, and urban expansion, also spread. Together, these created new flows of goods, ideas and people, which in turn forged new relationships with other partners, thereby expanding networks and connectivities to create widespread common social developments we recognize as a global culture. These operated within and alongside local practices (glocalization and the balance between global–local differences, respectively), which varied from place to place.

The Uruk phenomenon is perhaps the only well-known example of ancient West Asian globalization. This section draws out other, less well-considered examples to demonstrate both the applicability of globalization thinking and its variability in practice, from the Neolithic to the recent past.

Nieuwenhuyse's examination of the Halaf world assesses whether globalization can be useful for understanding the pre-Uruk connectivities in, around, and beyond Upper Mesopotamia during the sixth millennium BCE. He suggests that the effects of supra-local networks on how people interacted socially must be demonstrated to argue that these developments are evidence of globalization. The Halaf world was geographically expansive, ecologically heterogeneous, and exceptionally diverse in cultural practices. In becoming part of this world, and actively creating it, contributing Late Neolithic groups adopted similar house forms, administrative practices, and ceramic styles. These suggest increased inter-dependency with others at a distance, and social practice coalescence between participating communities. At the same time, glocalized diversities persisted, most potently illustrated in how Halaf ceramic ideas were incorporated into local productions and social traditions across a wide region. The scope, rate, and balance between shared and diverse practices complement one another within a globalized interpretation.

Mac Sweeney explores the extent to which connectivities evident during Anatolia's Bronze Age might be considered globalization. Connecting networks stretched at times into continental and northern Europe, the central Mediterranean, and central Asia. She observes that Anatolia began to enjoy complex, regular, and frequent long-distance connections, notably through bronze work and ceramic development, during the mid-third millennium BCE, aspects of which are best characterized as globalization. During the middle and late second millennium BCE, heightened connectivities developed again around Anatolia through diplomatic relations, formalized gift-giving, and intensified trade. For the competing kingdoms of western Anatolia, this emerged into a global culture of shared status expressions and a common artistic *koine*. Central (Hittite) Anatolia, however, developed its own status and power expressions, perhaps in explicit response to the increasing collaborations and understandings we regard as globalization. Mac Sweeney argues, therefore, that globalized socio-cultural developments may be predicated by political situations and the extent to which such connectivities are regulated by a centralized power.

A global culture emerges again from West Asia in the mid-first millennium BCE, via the Achaemenid Persians, and is Colburn's focus. With its heartland in the Fertile Crescent, at its peak the Persian empire extended from the Balkans to the Indus Valley, controlling diverse regions and developing slick systems to maintain its political authority. Long-distance interactions were key features of their successful rule. Their extensive road network – provisioned, maintained, and guarded – provided a means to move people and goods with ease. A relay postal system allowed swift transmission of information and commands, while Aramaic enabled those messages to be understood anywhere, despite Elamite being the main imperial administrative language. The introduction of a fixed, predictable calendar synchronized dates across the empire. Collectively, these fostered integration and enabled control. Colburn argues that while these do not represent a coherent globalization policy, the ideology of inclusion and participation points to appreciation of the potency of interaction as an integrative tool. Furthermore, the movement of people and objects resulted in new material culture forms and practices throughout the empire. Those associated with Achaemenid imperial power became especially prominent because they served as markers of connections to that power, such as in funerary practices. Other aspects unrelated to the empire per se became common precisely as a result of connectivity networks, further expanding the expression of global culture, such as the popularity of Bes images. Achaemenid rulers allowed these, for they further enhanced Achaemenid political control.

Mairs considers the development of globalization during the Hellenistic and Roman periods from lands spanning the eastern Mediterranean to north-west India. Since globalization in the Roman world is now a well-established paradigm for material culture studies (e.g. Pitts and Versluys 2015; Versluys 2014), Mairs focuses on life aspects not preserved materially yet which nevertheless contributed to the creation of globalized contexts and experiences. Beginning with a poem about a piece of lapis lazuli offered by a lover in exchange for a kiss, she explores how Buddhism, Indian textiles, and the Trojan War myth created a rich ideological context in which lapis lazuli itself circulated. Buddhism's early spread occurred within wider political and commercial contexts to consolidate the Mauryan emperor Aśoka's power. The movement of Indian cotton can be traced through literary and other sources, while the tale of Troy served as much a part of the visual culture of Gandhāra as it did elsewhere in the Hellenistic and Roman worlds. Collectively, these remind us that when we look at the circulation of preserved objects alone, we give insufficient emphasis to the rich non-material, vanished, and ideological exchanges that existed alongside and as part of the circulation of material cultures.

Vroom considers Ottoman-era globalization processes. She examines two types of Ottoman glazed tablewares, Iznik and Kütahya Ware, to argue that their social values and distribution around the empire, and beyond, pertain to proto-globalization. These wares were the most extensively trade glazed ceramic types between the sixteenth and late eighteenth centuries, with government-controlled production. Iznik Ware was an everyday ware for the Sultans, although it was a costly, elite commodity in Europe, where pieces were occasionally fitted with silver-gilt. Kütahya Ware, on the other hand, had specialized shapes, such as small coffee cups, found in intimate Ottoman social settings as much as Ottoman coffee houses. Together, these wares contributed to the ebb and flow of ideas, values, and practices within and beyond the Ottoman empire, enabling the empire to engage internationally and enhance shared practices within its borders. During an era that was evolving, integrating and expanding socially, politically, economically, and geographically, their consumption patterns and contexts reveal the very development of the balance between shared and diverse social practices within globalizing environments.

Although Achaemenid Persia's global era may have ceased 2,500 years ago, Potts discusses its continued global influence more recently. The nineteenth century marked Europe's rediscovery of Iranian antiquity, with excavations at Persepolis (1812; 1880s) and Susa (1850). In turn, a heightened awareness of Iran's pre-Islamic past was kindled among educated Iranians by European photography, while Nasr al-Din Shah, King of Persia from 1848 until 1896, discovered European approaches to its own antiquity during several European trips. In Tehran, he constructed three palaces, one in the style of Louis XVI, and a museum. The walls of buildings in between were decorated with glazed brick reliefs modelled on those of Darius's palace at Susa, which the Shah had seen at the Louvre. He filled his museum primarily with European porcelain and *objets d'art* acquired on his journeys, as well as ancient coins and ceramics, and his grandfather's royal crown. European interest in Achaemenid monuments, their early excavation, and a growing consciousness of Persia's monuments and history amongst Qajar-era intellectuals were joined by the Shah with the common language of valued objects, and the methods in which those objects were housed and displayed. Collectively, ancient Iran became enmeshed in a knowledge web populated by modern Iranians and Europeans that was – and remains – global by its very essence.

In these examples of past globalizations, communities belonged to their own local contexts and networks while operating more globally. Thus, each example reflects a different degree and nature of global and local interactions. Nevertheless, they reveal common characteristics, which underpin globalization in action: common expressions of status and power; similar visual styles; mutual uses of certain objects. These traits are not universal, however, and sit alongside diverse, independent practices. As scholars, we tend to focus on either these macro- or micro-scales. A globalizing perspective habilitates both and forces us to examine their balance, revealing the deep complexity of past societies and their developments.

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9.2
Globalizing the Halaf

Olivier P. Nieuwenhuyse

Introduction

Commenting on the organization of Middle Eastern societies in the millennia between the origins of farming and the appearance of the first cities, David Wengrow has remarked, 'This much neglected phase in world history needs a name. Perhaps it is best described as the first era of the global village' (Wengrow 2010: 54–55). In appropriating Wengrow's characterization of the Ubaid, my contribution to this volume will not be to argue that the Near Eastern Late Neolithic is simply 'an early version of', nor that we should trace back into the Late Neolithic the 'roots' of the globalizing Uruk cultures of the later fourth millennium (Jennings 2011: 57–76; this volume) or those of the third millennium Early Bronze Age (Kohl 1987). Indeed, many colleagues working in the region would argue that extrapolating the concept into the Neolithic world would be anachronistic, an imposition of our modern world views onto others far removed from ourselves. Nor would prehistoric interactions literally qualify as 'global', as they connected regions at scales much more modest than during later times of urbanized, imperial states (e.g. Versluys 2015; Vroom this volume; Robertson this volume). Adapting globalization theory to just any prehistoric society might risk losing out of sight the distinguishing aspects of this concept to explain the inner workings of advanced, complex societies.

Yet there are excellent reasons for exploring the applicability of the concept for pre-modern societies like the Halaf with an open mind. First, it forces us to look afresh at notions of the 'global'. Taking the lead from scholars like Jennings (2011, this volume) and many others (Knappett this volume; Feinman this volume; Vandkilde this volume; Wengrow 2010), I argue that space should be seen contextually, at geographic scales appropriate to specific historical contexts. Further, globalization usefully draws attention to the ways the local and non-local were mutually constitutive; it asks us to theorize how activities and change processes at the village level contributed to processes operating over much larger geographic areas, and *vice versa*, how such macro-processes in turn impacted upon everyday village life (Hodos 2015). Moving beyond Near Eastern prehistory, such discussions may act back on broader theoretical debates on globalization, by highlighting the variability in inter-regional interaction in human cultures past and present. A deep historical perspective is vital to understand properly conditions of connectivity cross-culturally (Feinman this volume; Hopkins 2002; Pitts and Versluys 2015).

This chapter shall explore to what degree aspects of globalization may be identified in this pre-modern case. Ancient Near Eastern prehistorians have had little difficulty accepting the vast spread of what has become known as the Halaf cultural tradition (for which see Akkermans 1993; Akkermans and Schwartz 2003; Campbell 1992; Hijara 1997; Matthews 2000; Nieuwenhuyse *et al*. 2013). Named after the site of Tell Halaf in northern Syria (Von Oppenheim and Schmidt 1943), the Halaf 'package' (*c*.6000–5300 cal. BCE) stretched from the Mediterranean coast to the Iranian Zagros mountain range, and from the Taurus mountain range south to the Syrian desert and beyond. Traditionally associated with the semi-arid dry-farming belt of Upper Mesopotamia, in its ideal, normative form this 'package' comprised particular subsistence forms (a reliance of mixed dry-farming agriculture and animal husbandry), typical house plans (circular *tholoi* buildings), the adoption of stamp seals and abstract 'tokens' as administrative tools, and a decided preference for stylistically elaborated pottery containers.

However, the key challenge has always been to understand the nature of Halaf interactions and the intriguing mixture of local and hyper-local scales at which these played out (Akkermans 1993; Campbell and Fletcher 2013). Earlier approaches tended to emphasize the strong cultural similarities over large regional distances as a Halaf hallmark, sometimes interpreting them as a sign of institutionalized social inequalities (Redman 1978). More recently, scholars have moved in the opposite direction, arguing that Halaf activities were mostly small scale, highly localized, and not indicative of sustained social inequality (Akkermans 2013; Bernbeck 2013; Hole 2013). For the enigma that is the Halaf, this tension makes it an interesting case study to explore the applicability of the concept of globalization.

In what follows, I call for reconceptualizing the Late Neolithic landscape as being 'global' in nature. I make the case for a significant surge in inter-regional interaction starting in the later seventh millennium leading up to what we call 'the Halaf'. I briefly review ideas on Halaf-period interaction, arguing that to such participants this resulted in a consciously perceived compression of time and space. Finally, I outline several cases of Halaf 'glocalization'. I start with scrutinizing the concept of globalization.

Globalizing aspects in pre-modern societies

Exploring pre-modern societies through a globalizing lens represents something of a challenge. Below I discuss how prehistorians may explore the 'global' aspect of the concept in the specific case of the Halaf. But there are additional conceptual hurdles to overcome. As Pitts and Versluys (2014) put it, appropriating a nice-sounding term merely because it is currently fashionable is not enough: why *should* the concept be used and what does it *add* to the debate? Why would globalization matter to a prehistorian?

The question is pertinent, as globalization has often been associated with world systems and modernity. After globalization emerged as a popular concept from the 1990s onward, scholars sought to 'pluralize' the perspective (Jennings 2011: 19), identifying numerous earlier episodes of globalizing interactions reaching deep into the past. Yet in many of its latest formulations, the spread of hyper-regional interactions remains associated with defining aspects of modernity, including imperialist adventures, state-organized trade, early forms of capitalism, and conspicuous elite activities (Chase-Dunn 2005; Frank and Gills 1993; Hopkins 2002). Lacking these in almost all of human prehistory, why bother with globalization as a concept? The world's earliest globalization is currently traced to the later fourth millennium BCE ancient Near Eastern Uruk culture (Jennings 2011: 57–76). Core–periphery relationships, long-distance trade organized by city states, and the role of Uruk as a powerful socio-political centre are at the heart of the Uruk debate (Algaze 2008; Stein 1999; Helwing 2000). If modernity began at Uruk, might we ask if globalization also started there?

The point is that key elements of the current understanding of globalization are *not* necessarily connected with modernity (Feinman this volume). Globalization as currently understood concerns those processes by which small-scale localities and peoples became increasingly interconnected and interdependent (Pitts and Versluys 2015). As eloquently outlined by Jennings (2011: 13–14, 21–32), in order to fulfil the qualification of 'global', two broad conditions should be met. First, archaeologists should demonstrate a significant leap in inter-regional 'interaction', what Vandkilde calls 'intensified interconnectedness' across social, economic and cultural systems and borders (this volume). Second, they should demonstrate social changes associated with the establishment of a 'global' culture. Importantly, these terms are relative and should be assessed in specific historical contexts.

Thus, 'global culture' does not equal long-distance exchange or supra-regional cultural similarity per se. Rather, it should be demonstrated that supra-local interactions had noticeable effects on how people interacted socially and through material culture. Foremost there should be the perceived experience amongst the communities concerned that the world was getting noticeably smaller. Some use the phrase *time–space compression* (e.g. Jennings 2011: 30, this volume), an acceleration of long-distance economic and social processes that shrink one's experience of time and space. Others use *transculture* to refer to people's perception of what is foreign to their small world (Epstein 1999; Vandkilde this volume). These concepts are eminently investigable by prehistoric archaeologists. Archaeologists routinely focus on those aspects of the material world that were symbolically important to actors in the past to negotiate identities at scales larger than the local community. These offer tools to investigate the degree to which activities in one locale were perceived to have been affected by what happened at places far away.

Other aspects central to current notions of global culture concern processes of standardization and homogenization that, paradoxically, go hand-in-hand with increased heterogeneity and a localized re-embeddedness of cultural expressions. During episodes of globalization both opposing tendencies typically occur simultaneously (Appadurai 1996; Vandkilde 2007). A useful neologism is 'glocalization', from 'global localization' (Robertson 1992: 173–74). As global movements are locally translated this typically results in 'hybrid' forms of expression (Helwing 2000). Larger, homogenizing cultural movements never existed by themselves in decontextualized isolation; they were always connected to local expressions at the level of the village or even the individual. The concept of glocalization helpfully emphasizes the degree to which the homogenizing elements of global culture were differentially incorporated into local cultures, in turn dialectically altering the course of the process (Pitts and Versluys 2015). Increasing similarity paradoxically brings a greater emphasis on difference as a direct response to, and a means of, distinguishing local groups (Hodos 2014).

A global Late Neolithic landscape

To what degree would the Halaf world qualify as 'global'? An issue here is a workable formal definition of 'the Halaf'. While most archaeologists would readily accept the short-hand definition of the Halaf package outlined above, they would acknowledge that the archaeology in fact attests to an extraordinary heterogeneity (Akkermans 1993; Akkermans and Schwartz 2003). Nor do Halaf scholars unanimously agree on either the spatial or the chronological boundaries of the Halaf cultural tradition (Bernbeck and Nieuwenhuyse 2013). The traditional solution has been to break up the cultural spread into smaller sub-units. Famously, Perkins (1949) already outlined a dichotomy between 'eastern' and 'western' Halaf sub-traditions. Halaf expressions from northern Syria and northern Iraq are generally held to be 'most typical', hence normative, whereas those from adjacent areas such as the Levant are often put away as 'Halaf influenced' (Davidson 1977).

'Slicing up' the Halaf results in smaller spatial units that neatly suggest some ecological or cultural homogeneity. Thus it has become commonly accepted that the Halaf in its 'most typical' formula was associated mainly with the semi-arid dry farming steppes of Upper Mesopotamia. However, it unhelpfully moves the debate away from explaining the nature of social and material interactions in the Late Neolithic (Campbell and Fletcher 2013; Hole 2013; Özbal and Gerritsen 2013). It risks reifying into discrete, artificial entities what may in fact have been overlapping social and economic networks (Nieuwenhuyse 2007). The archaeologist's construction of 'normative' cultures implies directionality of cultural influences, thought to spread out from an active 'core' into acquiescent 'peripheries'.

For our purposes, I identify the Halaf world with those parts of the ancient Middle East in which we find ceramics made in the Halaf style as broadly understood (Figure 9.2.1). This admittedly somewhat circular definition includes the enigmatic 'Halaf-Ubaid Transitional' episode as well as the earlier Pre-Halaf and Transitional (Proto-Halaf) stages characterized by decorated ceramics foreshadowing subsequent Halaf developments (Cruells and Nieuwenhuyse 2004). It includes regions within the geographic spread of Halaf Fine Ware ceramics but also parts where this pottery type represented a minority or was locally emulated in alternative technologies. In this definition, the Halaf phenomenon encompassed a vast territory that is today covered by at least three modern nation states: south-eastern Turkey, northern Syria and the Mediterranean, and northern Iraq including Iraqi Kurdistan. As Israeli archaeologists have not failed to observe, it stretched south to include the Wadi Rabah culture of Lebanon and northern Israel (Gopher and Gophna 1993).

Obviously, seen from the perspective of a Late Assyrian civil servant, Persian scribe or Ottoman traveller, this area of some 800 km east–west by 500 km north–south would not be perceived as excessively large, corresponding to a mere administrative province or two. These latter-day individuals would have had excellent transport means to cross this area within a matter of days, while efficient communications kept them informed on happenings in the far side of their empires. But to apply these proto-modern perceptions to a Late Neolithic dry-farming semi-pastoralist would be wholly inappropriate. To this prehistoric imaginary individual the Halaf world – in its broadest sense – would have been overwhelmingly large, ecologically heterogeneous, and culturally diverse.

In our times, trains, planes and automobiles allow us to roam the planet; in prehistory even villages in the next river valley could already be 'far away' (Diamond 2012). During the Late Neolithic, pack animals did not exist, save for perhaps the dog. Halaf communication transpired on foot. A recent study has modelled walking distances between parts of the Halaf world that we know interacted through the exchange of goods and resources (Ahmad 2014). These included obsidian, precious stone, raw copper, bitumen and painted pottery. Modelling walking speed as a function of carrying load, and using Google Maps to move from linear cartographic distances to actual walking distances, Ahmad has demonstrated that for procuring a vital raw material such as bitumen from sources in northern Iraq, the community living at Tell Sabi Abyad would have had to cover a walking distance of nearly 400 km if they were to go directly to the source. Carrying on average 15 kg per person, a direct return visit would have taken approximately a month, or two months if the farthest attested bitumen source was utilized (Ahmad 2014: 99–101). Yet despite these huge distances and time investments, goods travelled in a regular flow.

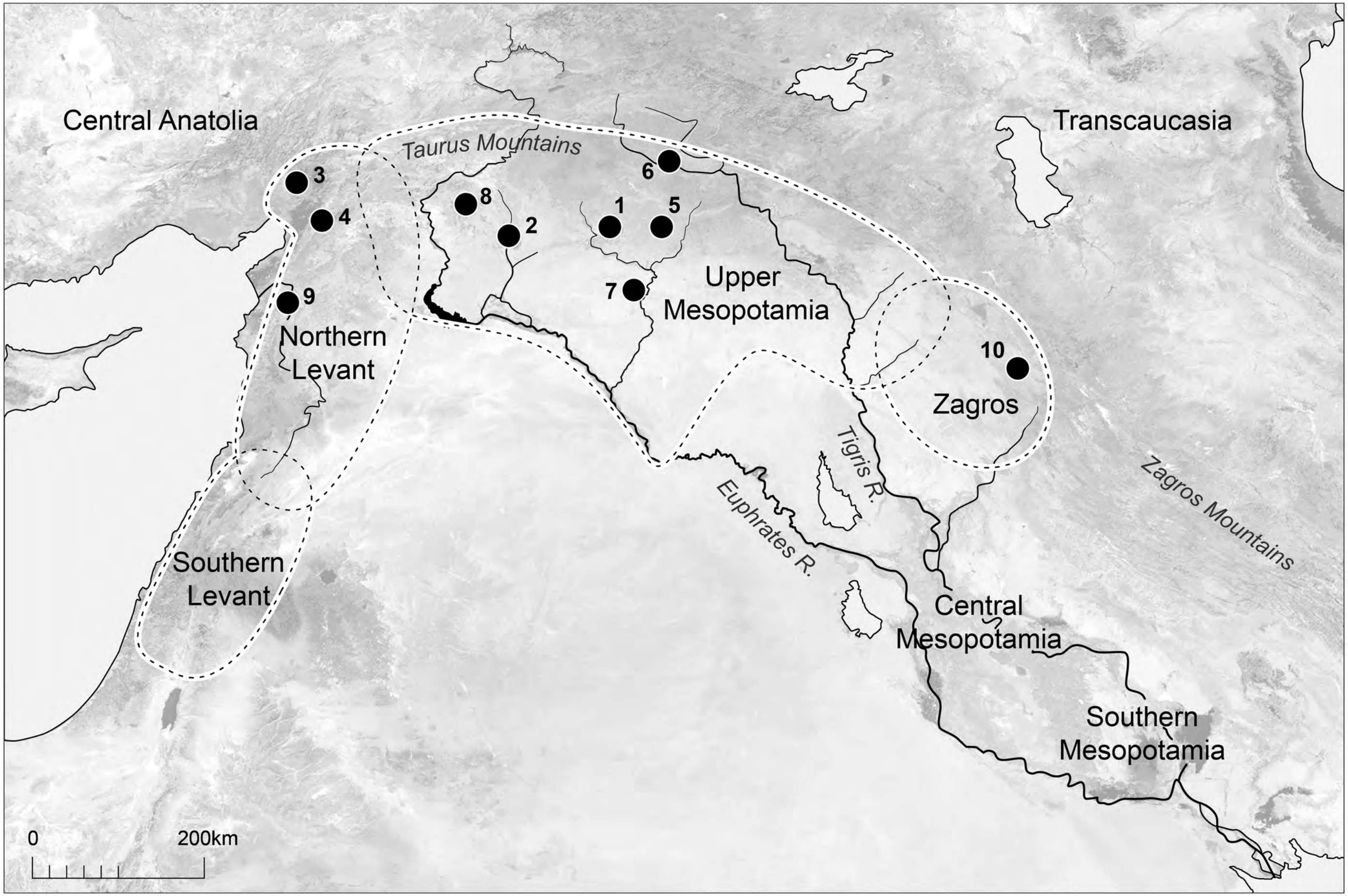

Figure 9.2.1 The Halaf world and sub-regions, showing the locations of sites mentioned in the text: (1) Tell Halaf, (2) Tell Sabi Abyad, (3) Domuztepe, (4) Tell Kurdu, (5) Chagar Bazar, (6) Hakemi Use, (7) Umm Qseir, (8) Fıstıklı Höyük, (9) Tell el-Kerkh, (10) Tell Begum

The world that people knew through such exchanges was ecologically very heterogeneous. Belying the view that the Halafians inhabited mainly the Upper Mesopotamian dry-farming belt, in fact this cultural tradition spread far beyond the confines of the steppe. We find an extraordinary range of ecosystems. They ranged from (predominantly) semi-arid steppes to the lush river valleys of the mighty Euphrates and Tigris rivers and their many tributaries, from steep foothills and intermontane planes to the Mediterranean coast. Not surprisingly, we find the Halaf cultural tradition associated with a huge variability in subsistence adaptations: from communities relying mainly on the hunt to those specializing in herding and secondary products, to others relying fully on agriculture (Akkermans and Schwartz 2003).

To call the inhabitants of this world culturally diverse would be a serious understatement. Recent landscape studies attest to small (less than 0.5 ha), almost invisible hamlets as well as tall mounds running up to 20 ha or more (Akkermans 1993; Campbell 1992; Nieuwenhuyse 2000; Nieuwenhuyse and Wilkinson 2007). Some villages contained ephemeral constructions only and lots of open space, but others comprised dense agglomerations of architecture more commonly associated with Anatolian traditions (Özbal and Gerritsen 2013). Typical were the circular *tholoi* buildings, but many Halafian sites show rectilinear architecture instead. In some Iraqi Halaf villages we may find tripartite house forms more commonly associated with the Ubaid culture (Breniquet 1991).

The smaller Halaf villages typically were rather short-lived, occupied for just a few generations. Scholars have debated how this may attest to the small-scale, non-hierarchical character of Halaf societies. Scalar stresses were mostly avoided by ‘voting with the feet’ (Akkermans 2013; Bernbeck 2013; Breniquet 1996). Throughout the period people were constantly on the move, abandoning villages and starting new ones. Yet some of the larger villages were inhabited for many generations. These will have been regional centres for the inhabitants of the wider landscape. At Domuztepe in Turkey (Campbell and Fletcher 2013: 42–43), Tell Sabi Abyad in Syria (Akkermans *et al*. 2012; Verhoeven 2000), and Arpachiyah in northern Iraq (Hijara 1978), complex collective rituals involving notions of death and abandonment may have offered the social cohesion keeping these larger populations together. But the specific socio-political models adopted by Halaf groups appear to have differed from place to place. So did apparently ritual and religious practices. The burial record shows a bewildering idiosyncrasy, which has so far defied attempts to identify a common identity or a generally accepted religious belief system (Akkermans 1989; Verhoeven 2002).

Even if we would adopt the more restricted definition of the Halaf in its ‘most typical’ form as restricted to the northern Syrian steppes, there is no reason to assume that the communities inhabiting this landscape were ethnically homogeneous, or even spoke a similar language (Frangipane 2015; Hole 2013). And certainly if we accept the much broader definition espoused in this paper, any notion of cultural homogeneity evaporates, apart from the shared ceramic tradition. What we term the Halaf tradition in fact united a broad variety of earlier, much more localized traditions, each characterized by distinct ceramics, lithic tool traditions and material culture assemblages (Akkermans 1993; 1997; Cruells and Nieuwenhuyse 2004; Nieuwenhuyse 2007; Forest 2013). Aurenche and Kozlowski (1999) argue that these earlier culture groups reflected different regional–ethnic identities. Whatever linguistic or ethnic categorizations existed prior to the Halaf, these almost certainly endured during the Halaf period.

Of course, a fractured landscape alone doesn’t constitute a global world (Jennings this volume); it needs to be demonstrated that people crossed this world regularly, were aware of places far away, and were locally impacted by what happened elsewhere. Inhabited by small-scale localized societies, it might be argued, the flow of non-local goods across these territories was always in low quantities. Most of it proceeded through down-the-line modes of exchange; there was little need for shared institutions to allow cultural barriers to be crossed. More daring long-distance trading expeditions would have been exceptional and most people never looked much beyond the local horizon. This small-scale localized picture characterizes the *earlier* stages of the Late Neolithic. At the end of the seventh millennium, however, something remarkable happened. Local groups began to interact across all corners of this landscape with an intensity not previously seen.

A surge in inter-regional interaction

Starting *c.*6300 cal. BCE, the archaeological record attests a series of profound transformations, the outcome of which was the emergence of the Halaf cultural tradition across Upper Mesopotamia *c.*5950 cal. BCE (Akkermans 1993; 1997; Campbell 1992; Nieuwenhuyse 2007). Becoming part of the Halaf phenomenon, and in doing so actively *creating* it, the various Late Neolithic groups, previously highly localized, adopted similar house forms, administrative practices using stamp seals carrying similar iconography, and closely comparable practices involving stylistically elaborated ceramics. Three characteristics in conjunction support the notion that these innovations reflect a significant surge in inter-regional interaction.

First, the striking stylistic similarities over large distances, crossing regional, ecological and geographic boundaries as if these never existed. Halaf interactions covered hundreds of kilometres. Although no archaeologist would claim that cultural expressions across these realms were uniform (see below), it cannot be denied that they became far more similar than ever before, and referenced geographic scales well beyond the local horizon.

Second, rapid, continuous stylistic change. As Peter Akkermans (1993) observed, this may have been less obvious in earlier studies because of poor absolute dating and superficial ceramic analysis at key sites. For long, a rough tripartite distinction of 'early', 'middle' and 'late' was the closest we had to grasping stylistic innovation. Recent studies combine detailed stratigraphies with solid absolute dates to recognize micro-horizons at time spans within discursive memory to peoples of the past. Subtle design changes may now differentiate sub-phases of sometimes only 30–50 years (Akkermans 2014). People must have been aware that fashions were in constant flux. They would have known that their grandparents were using noticeably different containers and that subsequent generations would again be using different forms.

Third, closely comparable style change occurring *simultaneously* over large distances. At Tell Sabi Abyad, Chagar Bazar and Hakemi Use, we find not only ceramic assemblages composed of the same wares, decorative techniques, and similar design structures and motifs, but also similar rapid style changes (Cruells *et al.* 2013; Tekin 2013). Situated hundreds of kilometres apart as the crow flies, these three sites occupy distinct ecological niches and were in all likelihood inhabited by regional groups with different linguistic, ethnic and economic backgrounds. Yet, to the degree that we understand absolute dates, rapid style change at these localities may well have been near simultaneous.

Understanding the nature of these interactions lies at the heart of Halaf archaeology. Interaction is contingent on the movement of goods, people or ideas; all three were relevant for the Halaf period. However, in spite of decades of research we remain insufficiently informed on the frequency, strength and direction of this networking (Knappett this volume). We know that painted vessels were exchanged, potentially over large distances, even if the organization of ceramic exchange remains elusive (Davidson 1977; Le Mière and Picon 2008; Spataro and Fletcher 2010). Other goods, too, travelled great distances, including raw copper, obsidian, bitumen and precious stone. Increased subsistence mobility and the emergence of semi-pastoralist lifeways fostered contacts and mutual dependencies between different groups (Verhoeven 1999). Jean-Daniel Forest (1996, 2013) has argued forcefully that the later seventh millennium saw a reorganization of marital exchange practices. In the Halaf period spouses could come from afar, bringing with them innovating ceramic knowledge and exotic design approaches. For present purposes, what these various interpretations have in common is an increased *interdependency* of local communities with groups or individuals far away.

Rather than focusing too much on the formal properties of Halaf pottery, we should explore the social practices it came to represent. Importantly, the decorated vessels functioned in high-visibility contexts; they were pots to be seen (Hole 2013: 85). They reflect a new emphasis on stylistically elaborated commensal practices, including large-scale, collective feasts as well as everyday household events (Nieuwenhuyse 2007; Özbal and Geritsen 2013). The Halaf period saw the introduction of feast iconography in the form of dancing figures painted on Fine Ware serving vessels (Garfinkel 2003); the painted serving vessels were necessary props in such events. There were new foods, new ways of cooking, and new ways of eating (Campbell and Fletcher 2013: 45; Nieuwenhuyse 2013). These new practices probably involved a fair degree of competition, spurring continuous emulation of new forms (Nieuwenhuyse 2007: 219–23), but participants will ostensibly have emphasized hospitality and mutual understanding (Wengrow 2010). Adopting these practices allowed local communities to overcome cultural boundaries.

Local and global in Halaf interaction

At first sight, Halaf material culture looks very similar wherever one finds it. Watson and LeBlanc famously went as far as proposing that '80–90 percent of the sherds from any given Halafian site would not be out of place at any other Halafian site' (1973: no page). In the 1970s and 1980s, scholars intrigued by this remarkable feat of social intercourse suggested one could measure both the strength and direction of Halaf interaction by computing the stylistic similarity in the painted designs (Davidson 1977; LeBlanc and Watson 1973; Watson 1983). More recent studies have seen a dedicated move away from these earlier emphases on stylistic homogeneity to search for localized differences behind the conspicuous similarities. In doing so, they have identified several instances of Halaf 'glocalization'.

One means has been through the adoption of a linguistic analogue. Scholars have sought to identify the rules of 'grammar' to define the Halaf painted language. In this approach, the abstract motifs ('morphemes') represent the smallest linguistic units which may be combined in overall design structures to create sentences and speech. Initially, such structuralist approaches focused on defining the Halaf style language as a whole and how it differed from contemporaneous entities such as the Ubaid or Samarra (Bernbeck 1994; Hole 1984; Van Berg 1987). Fascinatingly, the approach has resulted in the identification of localized differences *within* the Halaf. Thus, Frank Hole (2013, in press) has identified several 'dialects' within the Halaf painted idiom. Carinated bowls from Chagar Bazar and Umm Qseir may look rather similar at first sight, but Hole's structuralist close reading reveals consistent differences in the way motifs were selected in combination or sequentially ordered on the vessel. Implicit in Hole's account is the notion that these differences were consciously perceived by Halaf participants. That is, the designs would have been instrumental in inducing a perception of 'otherness' and at the same time a sense of belonging *vis à vis* other Halafian communities.

Delving even deeper into the fascinating world of Halafian geometric motifs, Gabriella Castro-Gessner (2010, 2013) studies what she calls the 'anatomy of the brush stroke', minutely reconstructing the *châine opératoire* of the individual painted designs. Identifying groups of closely interacting potters that potentially represent village-based production units, she demonstrates that pots that may look identical at the motif and design structure levels can be very dissimilar in the way these were sequentially constructed by individual potters. For instance, Halaf bowls

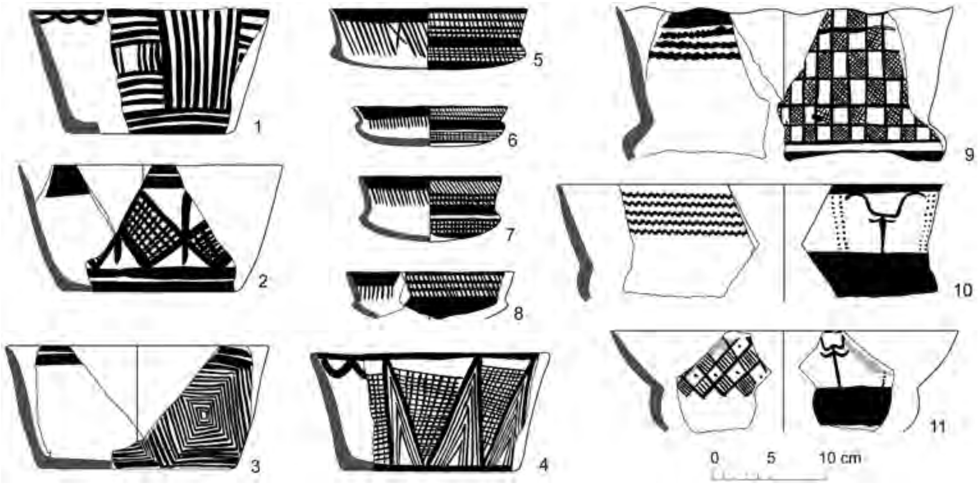

Figure 9.2.2 Halaf painted serving vessels from Tell Sabi Abyad (after Nieuwenhuyse n.d.)

from Tell Sabi Abyad and Fıstıklı Höyük show the same geometric motifs, but built up from basic elements in different sequences (Figure 9.2.2). Such technological choices held social significance. The inhabitants of Sabi Abyad and Fıstıklı would have been able to distinguish their own community *habitus* from those of others, even if they were perhaps not able to articulate it (Castro-Gessner 2013: 132). Thus, their choices reflected on their identity as a member of their local community *and* as a participant in the broader Halaf phenomenon.

A conspicuous case of Halaf 'glocalization' comes from Tell el-Kerkh in the northern Levant. Here ceramic assemblages were dominated by dark-coloured, glossy Dark-Faced Burnished Ware (DFBW). Intriguingly, Kerkh potters produced serving vessels identical to the painted Halaf pottery from northern Syria in shape, size and design structure (Figure 9.2.3). There was one minor difference: they made them in DFBW and decorated them with pattern-burnishing instead (Tsuneki *et al.* 2000). To prehistorians adhering to strict typological definitions of what constitutes Halaf pottery, the Kerkh DFBW bowls would fall beyond the scope of any Halaf discussion. But if we leave aside purist typologies to examine the potential social roles of decorated vessels, the two categories may have functioned in similar ways. Both would have symbolically carried associations with conspicuous commensality, feasting and demonstrating hospitality. That they did so in stylistically similar ways suggests strong connectivity with groups from northern Syria no less significant than those between northern Syrian groups and their other Halafian neighbours. Rather than as a peripheral response to 'influences' stemming from a presumed Halaf 'core', the Kerkh bowls should be seen as an active 'northern Levantine' contribution to the Halaf phenomenon.

Not far from Tell el-Kerkh, Tell Kurdu provides an intriguing perspective on a northern Levantine community participating in not just the Halaf phenomenon, through which they emphasized their west–east connections, but also ritual practices connected to the southern Levant (Özbal and Gerritsen 2013). Most of the ceramics at Kurdu were locally made, undecorated DFBW and plain unburnished ware used for cooking (Figure 9.2.4). However, in each of the excavated households a small proportion of painted Halaf Fine Ware occurs. Mostly locally produced, the decorative style reflected the broader, 'international' Late Halaf taste of the time (Özbal and Geritsen 2013: 111–12). Similar to the Tell el-Kerkh DFBW bowls, the Kurdu

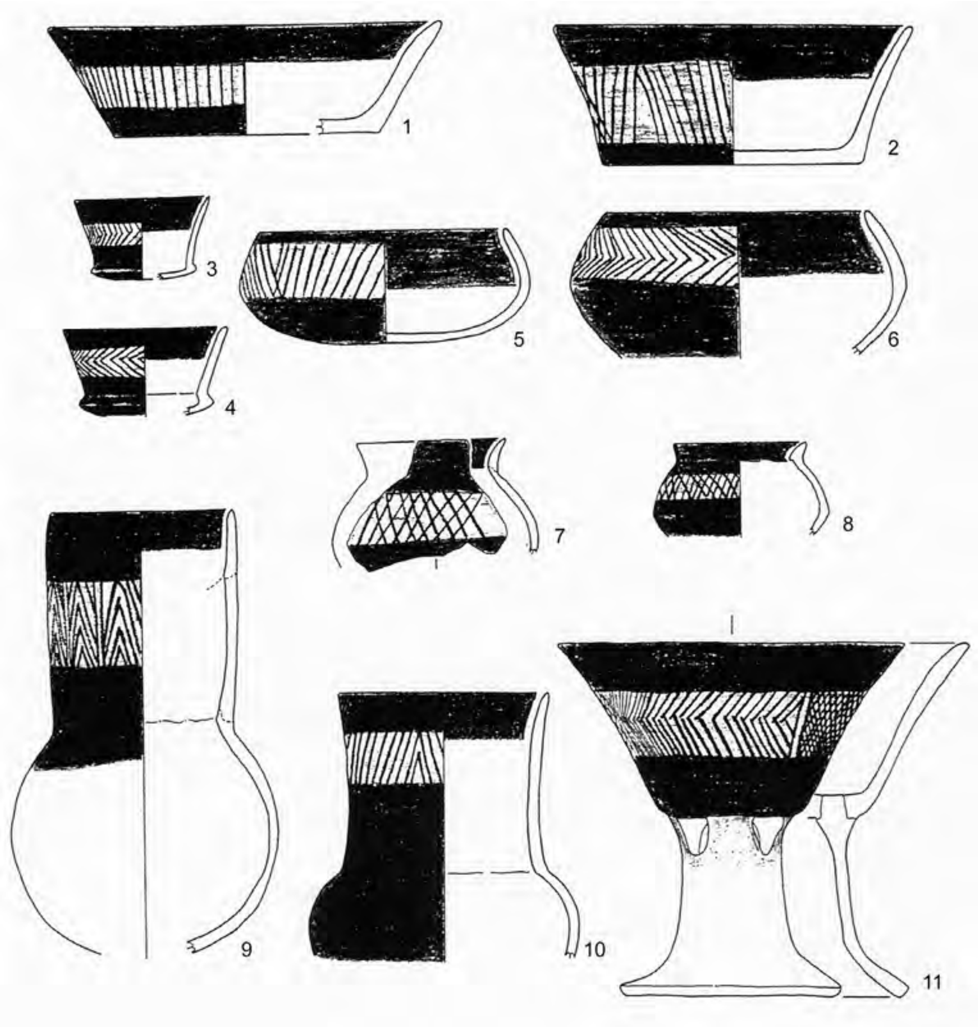

Figure 9.2.3 Halaf pattern-burnished DFBW service vessels from Tell el-Kerkh (courtesy Prof. A. Tsuneki, Tsukuba University)

Halaf pottery would have been used for serving and consuming food and drink either within individual households or at the level of the village. The inhabitants of Tell Kurdu thus were able to play their part hosting and feasting visitors in 'Halaf fashion', while also emphasizing their local 'Kurdu' identity. Intriguingly, in addition to Halaf vessels, fenestrated pot stands were found concentrated in one part of the village. Alien to Halaf assemblages, the type is well known from the southern Levant where it had ritualized uses. Through participating in these practices, some Kurdu households maintained their contacts with groups farther south. The excavators emphasize that these foreign styles were not merely simply 'imitations', but were appropriated selectively to meet *local* needs (Özbal and Gerritsen 2013: 108, emphasis added).

The contemporaries of the Halafians in northern Israel, for their part, certainly were aware of cultural developments further north. During the Wadi Rabah period, southern Levantine groups choose to emulate Late Halaf vessel shapes (Garfinkel 1999; Gopher and Gophna 1993). Halaf-style stamp seals attest the adoption of administrative systems initiated by northern Syrian

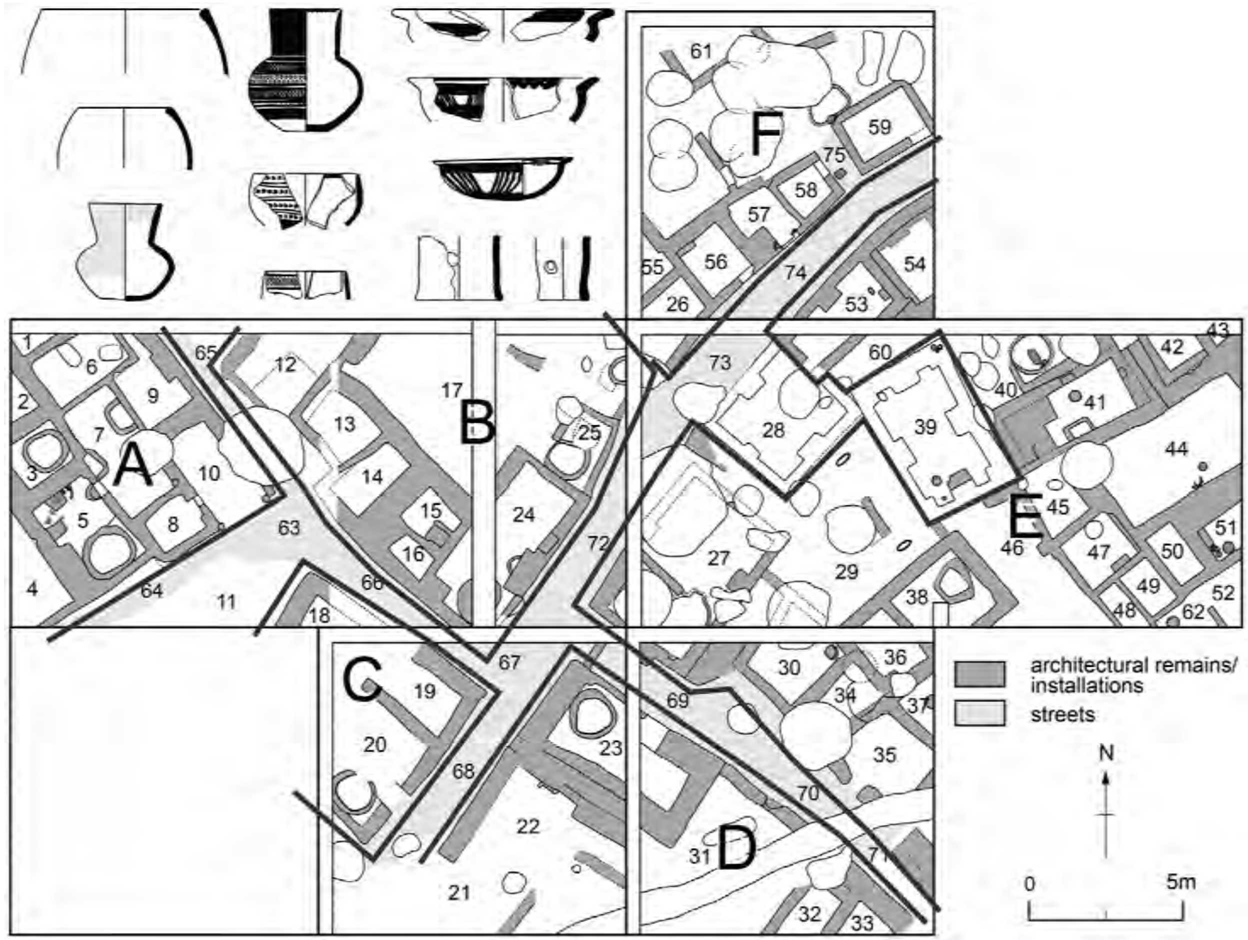

Figure 9.2.4 The Late Halaf village at Tell Kurdu and associated ceramics (after Özbal and Gerritsen 2013: figsres 8.3–4)

groups several centuries earlier (Getzov 2011). Provenance studies have shown that participants of the Wadi Rabah tradition maintained exchange networks to facilitate a regular stream of Anatolian obsidian and northern Levantine dark-stone vessels into northern Israel (Rosenberg *et al.* 2010). Significantly, some of these luxurious stone vessels resemble Halaf carinated bowls closely (Rosenberg *et al.* 2010: 286–87, figure 6). As with Halafian sites further north, the stylistically elaborated Wadi Rabah serving vessels would have functioned in the realm of feasting, hosting and entertaining guests, thus allowing Wadi Rabah participants to be part of the Halaf phenomenon while simultaneously keeping to their southern Levantine identity.

Finally, at Tell Begum in the Shahrizor Valley of Iraqi Kurdistan we find another localized expression of the Halaf. Already in the foothills of the Zagros Mountains, we are on the eastern margins of the Halaf distribution, what Ismail Hijara (1997) dubbed the 'Halaf Mountains'. Halaf sites are well represented on this fertile but enclosed intermontane plain (Altaweel *et al.* 2012; Nieuwenhuyse *et al.* in press; Wengrow *et al.* in press). In general, the associated material culture fits well in the common Halaf repertoire, in particular the stylistically elaborated serving vessels. However, on closer look the Shahrizor pottery is not *exactly* similar to what we have come to known as Halaf elsewhere. Local potters chose slightly different preparation strategies for making their painted vessels, tempering their clays with fine chaff. This would have been unthinkable to a northern Syrian Halaf potter. Moreover, they developed a stunning array of polychrome painted designs. Polychrome painted Halaf ceramics are well known from sites elsewhere (Gomez-Bach *et al.* 2012), but both quantitatively and qualitatively the Shahrizor material so far remains unique. Apparently Late Neolithic communities in the Zagros thought it important to be part of the Halaf phenomenon, but to do so on their own terms.

Concluding remarks

To the Halafians, then, the world was large and complex and they knew it. Certainly, communities were mostly self-sufficient and most activities were conducted locally. Most people were socialized close to their native village. Probably no Late Neolithic individual ever travelled the entire swathe of the Halaf realm. Yet, the archaeology overwhelmingly suggests that starting in the later seventh millennium BCE, the increasing interaction across a culturally and ecologically diverse world that we reconstruct as archaeologists was felt in a very real sense by Late Neolithic groups inhabiting this world.

To globalization theorists, discussing Halaf interactions through a globalizing lens may offer a valuable additional case study in a far earlier, much less familiar context that however has seen significant research recently. The Halaf phenomenon was characterized by specific types of networking, operated at scales specific to this historic context, and saw specific material and social consequences emanating from increased interactions. Near Eastern prehistorians, for their part, may profit from the explicit emphasis on studying interactions and social practices at a variety of scales. We cannot understand the Halaf if we focus on the local exclusively, nor can we make sense of it by prioritizing the supra-local. The globalization discourse may add to the conceptual toolbox we use to study the Halaf.

Discussing the Halaf phenomenon as an early example of globalizing tendencies, I have argued that we may identify aspects of globalization in this specific case. These include a 'global', culturally diverse landscape, a surge in inter-regional interaction, a perceived compression of time and space, and several instances of 'glocalization'. As regional groups increasingly became interdependent, increasing homogenization and cultural standardization went hand-in-hand with marked expressions of localized practices and identities. For past scholars, this cultural variability often either led to the attempt to 'slice up' the cultural spread of the Halaf into smaller, more homogeneous sub-entities, or to an uneasiness about the proper culture–historical attribution of key sites. Instead, we should acknowledge that such localized expressions of a shared idiom were not deviations from a hypothesized norm but were at the core of the Halafian world.

The globalization literature offers an interesting array of '-izations' for specific regional, temporal and cultural studies. Thus, we now have 'Romanization 2.0' (Versluys 2015), 'Minoanization' (Knappett this volume), 'Bronzization' (Vandkilde this volume), even 'Euroasianafricanization' (Knappett this volume). One issue with such terms is that they are not all the same, and they should not be seen as equivalent. On the one hand, as Knappett and Feinman observe (this volume), such terms helpfully convey the notion that social changes leading to intensified connectivity unfolded over space and time. On the other hand, globalization differs from other such '-izations' because of the singular priority they assign whatever the root is, e.g. the Romans, Minoans, or bronze as a valuable commodity. More flexible and culturally neutral, the concept of globalization is about shared sets of practices, not identically replicated ones, enabling one to balance common features against localized differences. The concept pulls away from core–periphery frameworks, and notions of politicized cultural dominance.

I would therefore shy away from proposing 'Halafization'. For the Halaf the term would selectively prioritize one specific material culture, so-called Halaf Fine Ware. It would assign 'core' status to those parts where this pottery dominated the ceramic assemblages. Ironically, this might exaggerate impressions of cultural homogeneity and imply new forms of core–periphery relationships. I would favour opening up the Halaf world conceptually, and regionally. As we have seen, what mattered was not a specific type of pottery per se but rather the intangible culture stylistically elaborated containers represented. In the later seventh millennium, a 'Halaf' style of social interaction took different forms in different places, connecting peoples at scales never seen before. This is the essence of the balance between global–local interactions, expressions and impacts. Its ability to rehabilitate them alongside one another in our interpretations is why Near Eastern prehistorians may profit from the globalization discourse.

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9.3

Connectivity and globalization in the Bronze Age of Anatolia

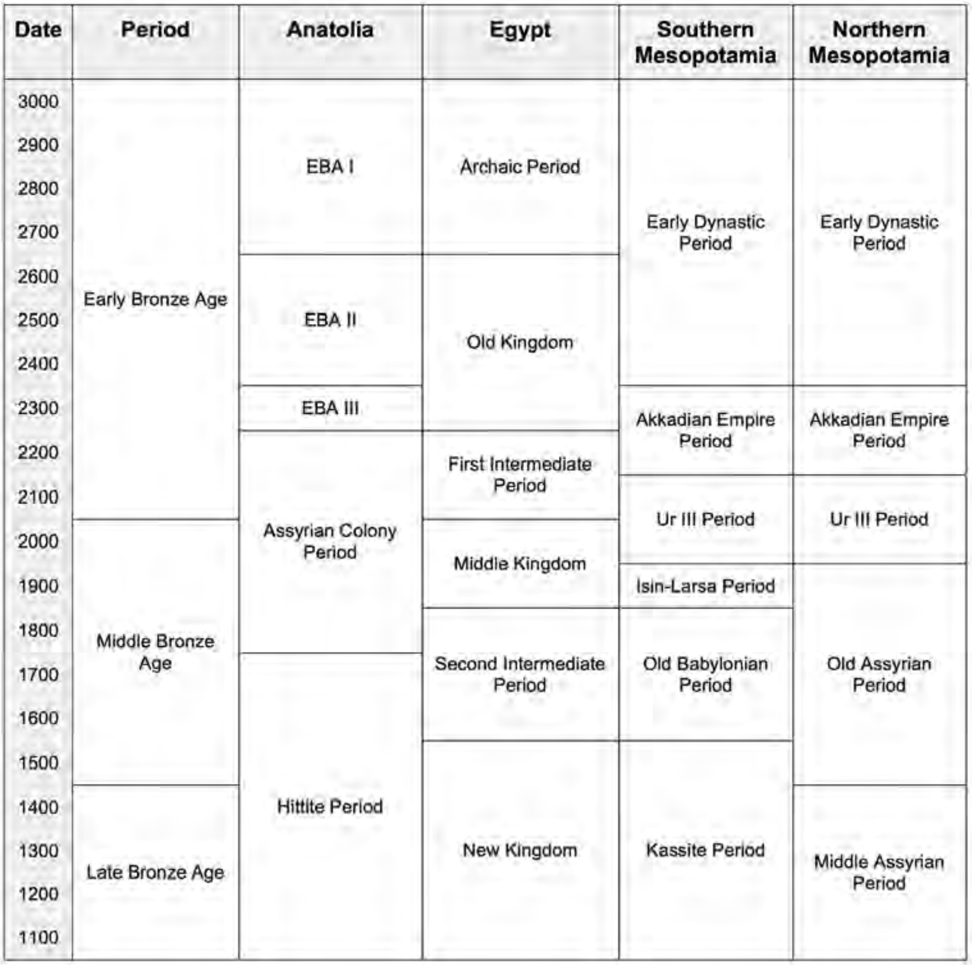
Naoíse Mac Sweeney

Introduction

The western Asian Bronze Age has long been recognized as a time of significant connectivity (Kohl 1987; Davies and Schofield 1995; Cline and Harris-Cline 1998). This connectivity varied both quantitatively and qualitatively, but generally there was a high level of inter-regional interaction throughout the period. The Bronze Age of western Asia therefore presents itself as a good candidate for premodern globalization, as defined by several authors in this volume (e.g. Feinman; Jennings; Knappett). This chapter investigates the extent to which various connectivities evident in the western Asian Bronze Age might be considered as globalization, and reflects on what may be learned from them for the study of globalization in archaeology more broadly.

The definition of globalization used here is a convenient amalgam of those presented in this volume's introductory sections. Globalization is considered as those processes by which complex, regular, frequent, multi-directional, and inter-regional connectivity leads to specific types of social and cultural change amongst connected populations. In agreement with others in this volume, even if these processes are not truly global in the strict planetary sense, the term 'globalization' can nonetheless be used to designate a particular phenomenon – a specific type of interplay between macro-scale connectivity and micro-scale socio-cultural change – which merits dedicated analysis. Such analysis necessarily involves investigation of both the 'global' (i.e. the wider network) and the local, and of both connectivity and change, as well as an examination of the relationship between the two.

This chapter focuses on inter-regional connectivity during the Bronze Age in western Asia (Figure 9.3.1). By their very definition, these networks extended beyond the area designated as western Asia, reaching into continental and northern Europe, the central Mediterranean (including both African and European shores), and central Asia. Connectivity through these networks will constitute the 'global' in this chapter. Also considered is the relationship between these networks and local developments within western Asia, with a case study focus on western and central Anatolia (Figure 9.3.2). The archaeological record here is both diverse enough to explore a range of responses to connectivity, and distinct enough to be considered a coherent region.



Date	Period	Anatolia	Egypt	Southern Mesopotamia	Northern Mesopotamia
3000	Early Bronze Age	EBA I	Archaic Period	Early Dynastic Period	Early Dynastic Period
2900					
2800					
2700					
2600		EBA II	Old Kingdom		
2500					
2400					
2300		EBA III		Akkadian Empire Period	Akkadian Empire Period
2200		Assyrian Colony Period	First Intermediate Period		
2100				Ur III Period	Ur III Period
2000	Middle Bronze Age		Middle Kingdom		
1900				Isin-Larsa Period	Old Assyrian Period
1800			Second Intermediate Period	Old Babylonian Period	
1700		Hittite Period			
1600					
1500			New Kingdom	Kassite Period	
1400	Late Bronze Age				Middle Assyrian Period
1300					
1200					
1100					

Figure 9.3.1 Chronology of western Asia during the Bronze Age

The Early Bronze Age (*c.*3000–2000 BCE)

The Anatolian Early Bronze Age (EBA) is considered a time of dramatic social and cultural change (Sagona and Zimansky 2009: 144–224; Düring 2011: 257–99; Steadman 2011). Several key developments occurred during this period, including an upswing in social stratification, urbanization, metallurgy, and long-distance connectivity. The relationship between the last and the first three is of particular interest.

EBA I has been called a 'proto-urban' period (Yakar 1985: 3–4). Settlements tend to take the form of villages, surrounded by what seem to be fortification walls. Examples of these nucleated proto-urban centres include Troy I (Blegen *et al.* 1950; Jablonka 2011), Demircihöyük (Korfmann 1983), and Tarsus (Goldman 1956). Some craft specialization is evident at these centres, such as that displayed in the high-quality ceramics of Beycesultan (Lloyd and Mellaart 1962: 116–17); and there seems to have been some concern for community identity, as demonstrated by the public space and village-level organization at Demircihöyük (Düring 2011: 268–69).

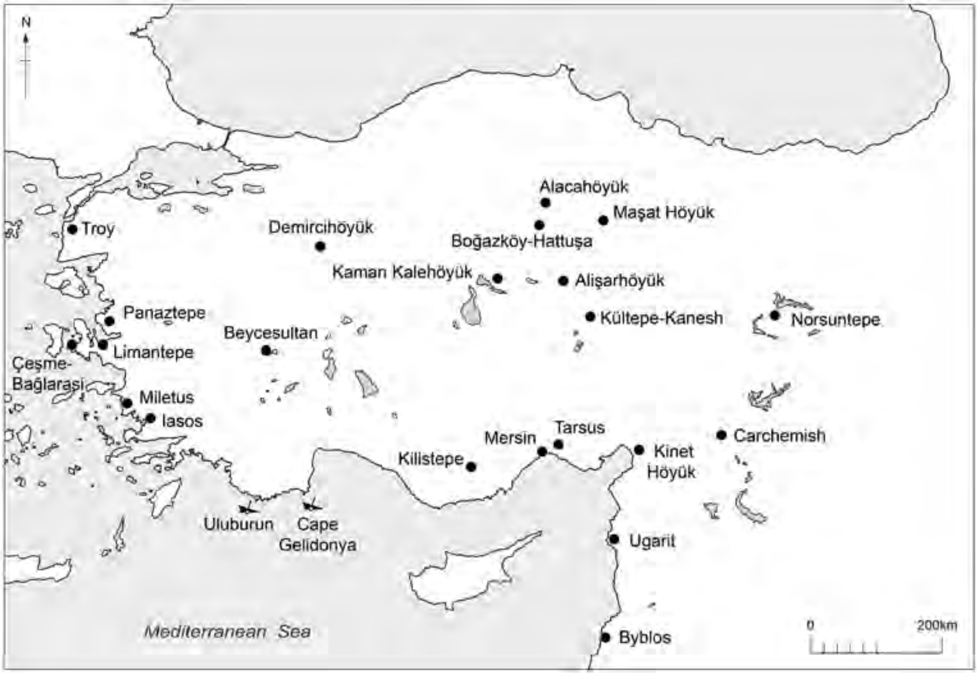


Figure 9.3.2 Map of Anatolia in the Bronze Age

There are also traces of inter-regional trade. At Troy, the material culture is so closely linked to that of the northern Aegean that it has been termed a 'maritime culture' (Sazcı 2005; Jablonka 2010: 851–82), while at Tarsus there are connections eastwards to northern Mesopotamia and Syria (Steadman 2011: 248). Few other sites, however, were integrated within long-distance networks. During this period, most of Anatolia does not seem to have partaken in the inter-regional connectivity that is a necessary prerequisite of globalization.

More widespread connectivity did emerge in EBA II. The clearest indicator is the marked increase in both the quantity and quality of metal finds across Anatolia. Artefacts manufactured from true bronze (made with tin as opposed to copper-arsenic alloys) appear in substantial quantities and a wide range of different forms. This is significant because the regular procurement of tin would have required reliable long-distance trade connections. There remains some uncertainty over the provenance of the tin used in Anatolian bronzes (Yener 2000), although it seems likely that the source was in central Asia (Düring 2011: 275; Muhly 2011: 866). If this is taken as representative of the scope of EBA II trade networks, we may infer that Anatolia enjoyed complex, regular, frequent, inter-regional connectivity.

Another development attests increased connectivity: convergence in material culture across Anatolia, indicating shared cultural practices. In particular, ceramic assemblages show greater coherence, and the popularization of standardized drinking shapes such as the *depas* cup suggests the spread of an elite culture involving alcohol consumption (Figure 9.3.3a: Şahoğlu 2005: 354; Düring 2011: 272–73). This convergence seems to have been due to the 'Anatolian Trade Network', a dense set of exchange networks that developed out of the long-distance metals trade (Şahoğlu 2005). The connectivity embodied in these networks was not only regular, frequent, and complex, but also inter-regional, incorporating the Aegean at its western extremity

(Şahoğlu 2005: 352; Kouka 2013), and Syro-Mesopotamia to the east/southeast (Mellink 1989). At the local level within Anatolia, this EBA II leap in connectivity was accompanied by significant social changes, especially the development of social differentiation and stratification. Architecture became increasingly monumental, both in settlement/citadel walls (e.g. Limantepe: Erkanal 1999: 240) and individual structures (e.g. Troy II: Blegen *et al.* 1950), implying the centralization of authority and resources. Dedicated cult buildings (e.g. Beycesultan: Lloyd and Mellaart 1962: 36–46) and paraphernalia appear (e.g. 'ceremonial standards', known in particular from Alacahöyük, Figure 9.3.3b: Zimmerman 2008), suggesting specialization and ritual systems codification. In addition, mortuary remains betray increased concern with individual status, even if a standardized vocabulary for articulating this had yet to be established (e.g. Demircihöyük-Sarıket: Seeher 2011). Overall, EBA II Anatolian societies displayed a heightened interest in social differentiation.

This intensified in EBA III, with evidence of greater settlement nucleation in western Anatolia, and wider use of the potter's wheel (e.g. Beycesultan: Lloyd and Mellaart 1962: 199). In central Anatolia, there were dramatic displays of wealth such as that found in the Alacahöyük 'royal tombs' (Bachhuber 2011; Düring 2011: 290–94). Connectivity increased further, in particular along the main overland routes from the Troad to Cilicia, what has been termed 'the Great Caravan Route' (Efe 2007). Midway through EBA III, however, there seems to have been some disruption, and the pattern of spiralling complexity was paused. Destruction levels are found at some sites (e.g. Troy: Blegen *et al.* 1950), and rebuilding appears to have been less monumental than previously (e.g. Limantepe: Şahoğlu 2005: 354). Long-distance contacts also seem to have suffered a temporary setback.

The emergence of complexity and social differentiation in EBA Anatolia has often been seen in the context of increased long-distance connectivity. In particular, it is sometimes explained by the influence of more complex societies in Mesopotamia (Edens 1992; Efe 2007: 60; Steadman 2011: 232). Mesopotamia's third millennium broadly encompassed the region's Early Dynastic, Akkadian Empire, and Ur III periods. Throughout this time, Mesopotamia was an urbanized society with large, concentrated populations living in independent city-states (Postgate 1992: 22–50; Van De Mieroop 2007: 41–62). These city-states were typically controlled by royal dynasties and boasted centralized bureaucracies, established temples and cults, and a rich literary tradition in Sumerian cuneiform. During the Early Dynastic period, these states competed with each other for influence and resources, until the city of Akkad rose to dominance at the start of the Akkadian Empire period (Van De Mieroop 2007: 63–73), later to be eclipsed by the Ur III dynasty (Van De Mieroop 2007: 73–84). Throughout the third millennium, the Mesopotamian cities were linked into complex networks of contacts, both within Mesopotamia and further afield. This wide connectivity began long before the start of the Bronze Age. During the preceding Uruk period in the fourth millennium, there had been an expansion of connectivity across a broad geographical area to include northern Mesopotamia, Syria, southern and eastern Anatolia, and the Iranian Zagros Mountains (Algaze 1993; Stein 1999; Rothman 2001; Van De Mieroop 2007: 35–39; Aubet 2013: 157–200). During the EBA itself, Mesopotamian trade networks expanded yet further, extending to the Arabian peninsula, coastal Iran, and the Indus valley (Edens 1992). An important stimulus for this was the demand from Mesopotamian elites for luxury and status goods. These were showcased in lavish wealth displays, such as Ur's royal cemetery (Cohen 2005). Competition between the city-states only served to intensify this demand, as the ruling dynasties competed with each other to procure both exotic goods and raw natural resources (Moorey 1999: 5–13; Podany 2010: 19–60). Metals were amongst the key desirable resources for Mesopotamian elites. Anatolia's rich metal ore deposits were therefore a reason for Mesopotamian interest in the region. Given this background, it has been

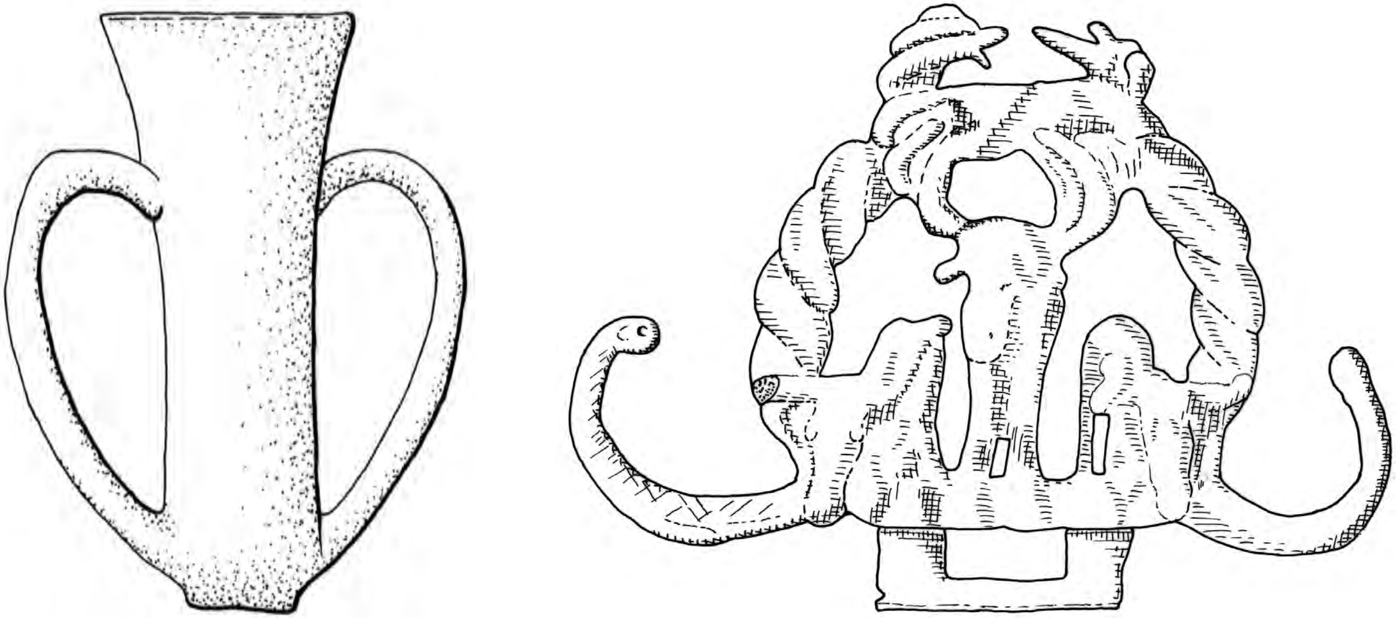


Figure 9.3.3 Artefacts from Early Bronze Age Anatolia: (a) depas cup from Troy, after Blegen 1963, figure 19; (b) standard from Alacahöyük, after Müller-Karpe 1974, plates 310/311. Not to scale

argued that the development of EBA complexity in Anatolia can be explained by contact with Mesopotamia's sophisticated, hierarchical, urban societies, which were themselves stimulated by the growing metals trade. Under this classic 'world systems' explanation, Anatolia was the periphery to Mesopotamia's core.

The chronological correlation between increased connectivity and greater complexity in EBA Anatolia is striking. The appearance of elite groups, constructing their status through monumental architecture and high-value objects, is broadly simultaneous with the expansion and intensification of both intra- and inter-regional contacts. However, an explanation for Anatolian developments based on cultural diffusion from Mesopotamia is unsatisfactory (Düring 2011: 298). First, several aspects of complexity emerged prior to the increase in Mesopotamian contacts at the start of EBA II; second, a diffusionist model does not account for local variation in the emergent complexity at different Anatolian sites; finally, a Mesopotamian-centred model does not explain the broader networks linking Anatolia to the Aegean, Thrace and continental Europe. How, then, should we understand the relationship between Anatolia's increased connectivity and social change? On the one hand, it seems that heightened connectivity drove social transformation and greater complexity, Mesopotamian influence combining with the new availability of metals, exotica and luxury goods, resulting in new status differentiation opportunities. At the same time, it seems that complexity and social change drove heightened connectivity, with emerging elites using their newly acquired resources to extend trade and social contacts further afield, cultivating new networks and gaining access to an ever wider range of status goods (Çevik 2007: 137). This interplay between the local and global, between connectivity and change, meets the definition of globalization established at the start of this chapter. The decentralized nature of this connectivity is crucially important. Mesopotamia may have exhibited more signs of complexity and hierarchy than other EBA western Asian regions, but this does not mean that it lay at the 'core' of an EBA world system with other regions like Anatolia on its 'periphery'. Rather, Anatolia's complex connectivity was shaped by a diverse range of actors.

The Middle Bronze Age (*c.*2000–1700 BCE)

After the fragmentation at the end of the EBA, Anatolia emerged into the Middle Bronze Age (MBA) as a patchwork of city and territorial states (Sagona and Zimansky 2009: 225–52; Michel 2011). Written sources are available from Anatolia, most famously over 23,000 documents from the Assyrian merchants' enclave (*kārum,* singular; *kārū*, plural) at Kültepe (Özguç 2003); similar archives have been unearthed at sites such as Boğazköy (Dercksen 2001), Alişar (Von Der Osten and Schmidt 1930–32; Von Der Osten and Krogman 1937), and Kaman-Kalehöyük (Yoshida 2002). These merchants' archives consist of documents written in Akkadian cuneiform on clay tablets – primarily letters, receipts, and other trade records (Figure 9.3.4). The merchants themselves were mostly Assyrians (although a few Anatolian merchants are also attested), residing in dedicated enclaves within Anatolian settlements (Michel 2001; Veenhof 2013).

The MBA states seem to have been strong, centralized political units, generally controlled by a single ruler (the Assyrian records give Anatolian rulers the title of *rubā'um* – 'prince') and controlling an agreed territory (the Assyrian records refer to these states as *mātū* – 'lands'). The Anatolian rulers were usually based in fortified central settlements with impressive monumental buildings. For example, the 'palace' in Level V Beycesultan was an imposing two-storey complex occupying a plot of 85 x 55 m, decorated with painted murals (Lloyd and Mellaart 1965). The 'Palace of Waršama' at Kültepe is even larger, surrounded by an enclosure wall of 120 × 110 m, and arranged around a central courtyard (Özguç 1999; Kulakoğlu 2011: 1017). Conflict between these MBA states was common: both Beycesultan and Kültepe were destroyed in violent burning

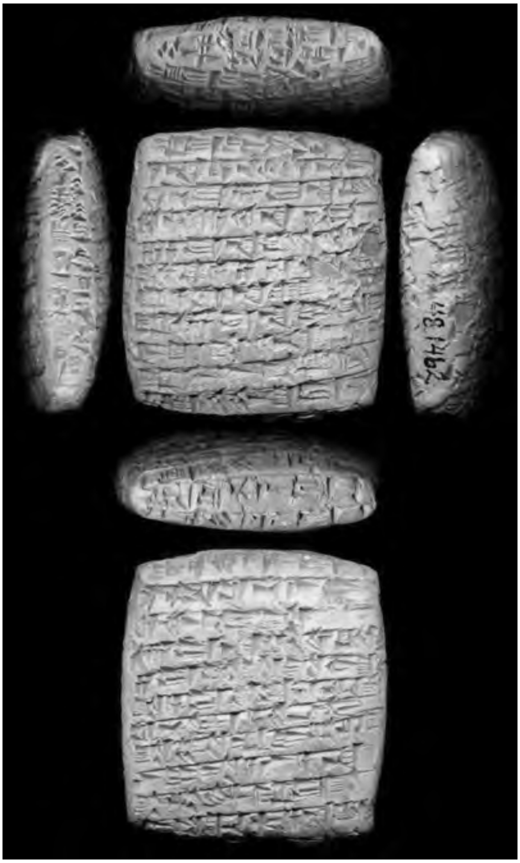


Figure 9.3.4 Cuneiform letter from Kültepe concerning the trade in precious metals. Photograph courtesy of the Walters Art Museum under the Creative Commons Attribution Share-Alike 3.0 Unported License

episodes, and the *kārum* texts often mention wars (Michel 2001). Conflict seems to have become more frequent towards the end of the MBA, disrupting the stability necessary for trade. In addition to regular conflict, diplomatic relations are also attested; the Assyrian documents record numerous shifting alliances, treaties, and trade agreements (Veenhof and Eidem 2008).

Details of these trade agreements can be inferred from the *kārum* texts (Veenhof 2000: 83–88; Aubet 2013: 307–64). The Assyrian merchants paid taxes to the Anatolian rulers for importing goods, and offered them preferential prices on key commodities. In return, the merchants were guaranteed protection, and residence rights in specific commercial enclaves (*kārū*) or smaller trading stations (*wabaratū,* plural; *wabartum*, singular). These *kārū* and *wabaratū* were linked into a single Assyrian trade network, answerable to and administered by the central *kārum* at Kültepe. At the Kültepe *kārum*, a formal merchants' association met regularly to deal with disputes, regulations and legal cases (Veenhof 2000: 103–05). This association was constrained in its activities by the central trading office in Aššur, the capital city of Assyria. The entire Assyrian trade network in Anatolia was therefore answerable to the Assyrian capital (Aubet 2013: 267–306). There is evidence for mixing and close interaction between settlers and locals, including bilingual individuals and mixed families (Michel 2008). The archaeological record suggests that Assyrian settlers lived in typically Anatolian homes, used typically Anatolian forms of material culture, and followed a typically Anatolian diet (Michel 2010). At Kültepe, for example, Assyrian ceramics are rare. Conversely, many Assyrian practices were adopted in Anatolia, cuneiform writing perhaps being the most obvious. Finally, from the combination of Assyrian and Anatolian traditions, hybrid practices also emerged – glyptic art on cylinder seals is a notable example (Michel 2010: 8).

In northern Mesopotamia, this period is known as the Old Assyrian Period, for Assyria's domination over the region (Van De Mieroop 2007: 94-103; Veenhof & Eidem 2008; in southern Mesopotamia, rivalry between the cities of Isin and Larsa was eventually quelled by the Amorite king of Babylon Hammurabi, ushering in the Old Babylonian Period). Even in Anatolia, which was not under Assyrian political control, the central role played by Assyria was such that the MBA is often referred to as the 'Assyrian Colony Period' (e.g. Bryce 1998). Assyria's influence came from its domination of Anatolia's long-distance networks. The all-important trade in metals was in the hands of Assyrians, including the import of tin for bronze manufacturing. Central Asian tin did not make its way directly to Anatolia, but was transported via Assyria. Similarly, silver and gold mined in Anatolia was exported not by Anatolian merchants, but mostly by Assyrians who brought the metals (initially at first) to Assyria. During the MBA, therefore, there was a clear direction and focus for Anatolia's inter-regional connections. This is a marked change from the previous EBA, when inter-regional contacts were more decentralized and multi-directional.

Western Anatolia was also drawn into the wider Assyrian orbit, as the EBA 'Great Caravan Route' became even more important. There was a major shift in Troy's material culture, and the 'maritime culture' of Troy I–III was replaced by the 'Anatolian culture' of Troy IV and V (Saczı 2005; Blum 2006; Jablonka 2010: 853). Only Aegean coastal sites remained outside the Assyrian-influenced sphere. Instead, westward interactions intensified; contacts with Crete were particularly strong, with Minoan objects, styles, technologies, and social practices appearing at sites including Miletus, Iasos, and Çeşme-Bağalarası (Vanschoonwinkel 2003; Erkanal and Keskin 2009; Momigliano 2009; Raymond 2009). The appearance of Minoan material culture in Anatolia was traditionally interpreted as evidence for Cretan colonization or a 'Minoan thalassocracy'. It is now recognized that the explanation is more complex, involving individual or low-level migration, local adoption and adaption, and mobility around the Aegean basin (Hägg and Marinatos 1984; Broodbank 2004; Knappett this volume). The connectivity demonstrated by these Aegean links is qualitatively different from that of the Assyrian trade networks. Like in the Assyrian-controlled networks, the Aegean connections were regular, frequent, and complex; it also included various different spheres of society and involved personal mobility as well as simply the exchange of objects. In contrast, however, this connectivity was small-scale, disorganized, and low-level. By the MBA, maritime routes around the Aegean were well trodden, having been used continually since the Chalcolithic period (Erkanal *et al.* 2008). In this context, it is perhaps more helpful to view the Aegean basin – including its Anatolian coast – as a coherent region. Connectivity around the Aegean may therefore be viewed as intra- rather than inter-regional (Momigliano 2009: 136–37).

Connectivity in MBA Anatolia can therefore be seen as occurring in two main ways. On one hand, there were the long-distance, commercial, formally organized networks overseen by the Assyrian merchants. On the other hand, there were also local and mid-distance intra-regional networks, where mobility and connectivity were informal and unregulated, and through which Anatolian communities interacted with their neighbours. This intra-regional interaction is perhaps best known from Anatolia's western coast. Similar local networks must have also operated throughout Anatolia. That less scholarly attention has been paid to such networks in central Anatolia is due to the nature of the available evidence, as well as to the current focus of academic disciplines. For the Anatolian plateau, the Assyrian *kārum* documents dominate our understanding of this period, while for the Aegean, the Minoan thalassocracy question overshadows most scholarly literature. With new archaeological research, the intra-regional interactions of central Anatolian communities may come into clearer focus. For the purposes of this chapter, however, neither of the two connectivity modes evident in MBA Anatolia are conducive to the kinds of socio-cultural change implicated in the term 'globalization'.

The Late Bronze Age (*c.*1700–1200 BCE)

The Anatolian Late Bronze Age (LBA) saw political centralization under the Hittite Empire (Sagona and Zimansky 2009: 253–90; Seeher 2011). The cuneiform archives kept by the Hittite administration offer a wealth of information about the nature of society and state workings (Van Den Hout 2011). The largest archive comes from the Hittite capital of Hattuša, but others have been found at provincial centres like Maşat Höyük (Mielke 2011). Epigraphic texts are also known, in the form of Luwian hieroglyphic inscriptions carved into rock faces or stone monuments (Figure 9.3.5a; Payne 2010; for Luwian studies more generally, see Mouton *et al.* 2013). Relevant literary sources are also available from other parts of western Asia (Hoffner 2009), including records of inter-regional diplomacy, the best known of which is the cuneiform archive at Amarna, Egypt (Moran 1992; Cohen and Westbrook 2000).

During the LBA, interactions between states were embedded within a complex diplomatic network. Diplomatic communication was plentiful, regular, and far-flung; it was carried out according to a formal code, with close attention paid to status and hierarchy (Podany 2010: 191–304). In particular, letters were regularly sent between what has been dubbed the 'Great Powers Club', consisting of the Great Kings of Hatti, Egypt, Babylon, and Mitanni (Liverani 2000; Van De Mieroop 2007: 129–48). These Great Kings carefully preserved the language of equality amongst themselves, referring to each other as 'My Brother', organizing dynastic marriages, and exchanging high-value 'gifts'. These gifts often took the form of luxury materials such as gold, silver, copper, lapis lazuli, and alabaster – highly prized materials that were vital for elite status articulation and could be considered 'staple' elite goods. Although this gift-giving was not strictly mercantile, it nonetheless constitutes a regularized exchange system, whereby participants' interests are safeguarded by obligations of reciprocity (Podany 2010: 243–64; Zaccagnini 2000). Diplomatic relations were also conducted with rulers of other independent states, some of whom were also accorded the title of 'Great King'. These included kings of Assyria, Alašiya (Cyprus), Ahhiyawa (somewhere in the Mycenaean Aegean), and Arzawa (western Anatolia; see below). A different sort of diplomatic activity was carried out between Great Powers and their vassal states; for the Pharaoh this included correspondence with subject rulers of south Levantine states such as Amurru, Byblos, and Shechem, while for the Hittite Great King this included interactions with rulers of Syrian territories like Ugarit and Carchemish.

Although state authorities were engaged in long-distance trading (Hoffner 2002), independent mercantile activity is also attested, especially in the great trading emporia of the Levant such as Ugarit (Yon *et al.* 1995) and Tyre (for a vivid description of Tyrian trade, see Ezekiel 27.12–14). In addition, shipwrecks such as Uluburun and Cape Gelidonya (Sherratt this volume) demonstrate the complex nature of LBA maritime trade, involving both the transportation of bulk goods as well as a 'tramping' trade in smaller, more valuable items (Manning and Hulin 2005). Not only were such prestige goods circulated widely around western Asia and the Mediterranean, but an 'international artistic *koine*' also emerged in luxury items (Feldman 2006). This *koine* featured hybridized imagery and styles, adopting elements from different regions and adapting them to suit new contexts and settings. Across LBA western Asia, elite goods were not only conspicuously international but also consciously internationalizing. Ideas about status were necessarily

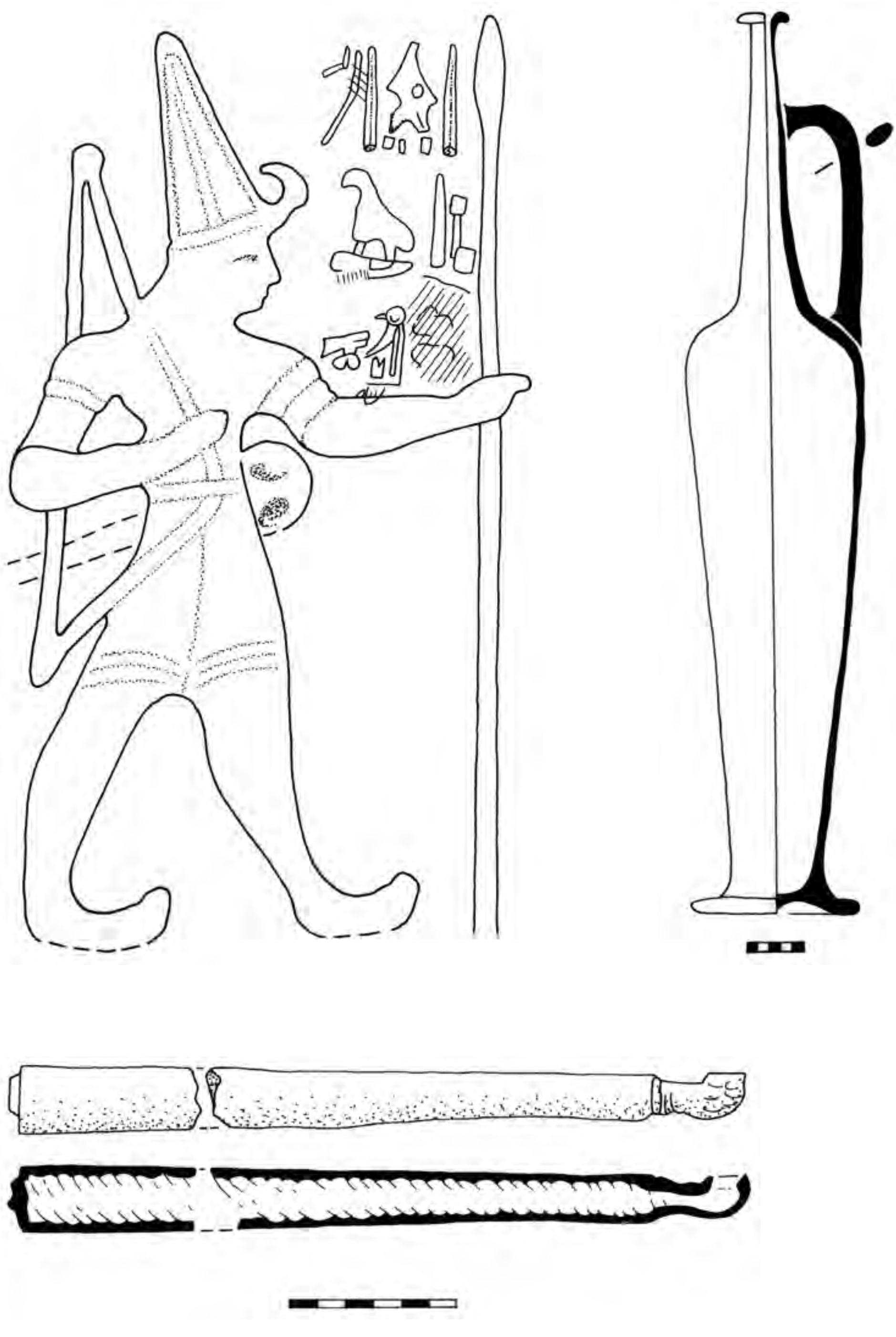


Figure 9.3.5 Artefacts from Late Bronze Age Anatolia: (a) relief with Luwian hieroglyphic inscription from Karabel, after Hawkins 1998, figure 4b (not to scale); (b) spindle bottle from Boğazköy, after Parzinger and Sanz 1992, plate 21.5; (c) libation arm from Ayios Iakovos, Cyprus, after Eriksson 1993, figure 7, 1014

transformed as part of this process, as were social structures and their significance. In general, therefore, LBA western Asia connectivity could be considered globalization. It was complex, frequent, regular, multi-directional and inter-regional. It also led to local-level changes in many parts of western Asia, especially regarding the construction of status.

This state of affairs is conspicuously not the case for Hittite Anatolia. Diplomatic interactions with the rest of western Asia are well attested, and imports from a wide range of regions have been found at various sites (Hoffner 2002, 2009). The Hittites clearly were involved in complex, dense connectivity networks that criss-crossed western Asia. Despite this, they chose not to engage in the deliberate internationalism of the time. Most notably, they eschewed the 'international style' in elite and luxury objects, opting instead for vernacular means of signalling status (Feldman 2006: 134–36). Additionally, imperial administration seems to have regulated external trade and contacts. The small amounts of Mycenaean pottery found in Hittite-controlled Anatolia is suggestive. Mycenaean ceramics, particularly stirrup jars likely containing perfumed oil, have been found widely across the Mediterranean and western Asia (Sherratt this volume). In contrast, they are almost totally absent in the Hittite Empire, suggesting at least a disinclination towards Aegean-manufactured goods, if not a formal embargo (Cline 1991). Other connections appear to have been favoured by the Hittites. For example, Cypriot red lustrous wheelmade ware was preferentially traded (Knappett *et al.* 2005). It is found, however, only in relatively few forms – most commonly spindle bottles and libation arms (Figure 9.3.5b and c). This enhanced trade in red lustrous wheelmade ware does not, therefore, represent a wholesale upswing in connections with Cyprus – rather, it suggests the selection of specific items. It is not clear whether this situation was the result of formal trading arrangements, or due to extremely pervasive cultural preferences. Regardless, it is evident that, for many Anatolians, the experience of connectivity was conditioned by being part of the Hittite Empire.

Inside the Hittite sphere, connectivity seems to have been close and regular. A high degree of standardization is evident in the ceramic repertoire, with most Hittite sites using a mass-produced, undecorated form of pottery that appears to have been manufactured centrally (Glatz 2009). These wares are not only known from Hattuša (Neve 1996; Seeher 2006; Mielke 2011) and the imperial heartland on the Anatolian plateau, but also from provincial sites such as Kinet Höyük (Gates 2001), Kilise Tepe (Postgate 2007), Gordion (Henrickson 2002), Norşuntepe (Korbel 1985), and Mersin (Jean 2006). This implies both economic control – regulating the production, distribution and consumption of key goods – and a degree of social and cultural influence, overriding local traditions (Seeher 2011).

The situation within Hittite-controlled areas is in marked contrast to that in the west. Western Anatolia at the time was a patchwork of small kingdoms and states, referred to in the literary record by the collective term 'Arzawa' (Mac Sweeney 2010). Arzawa remained autonomous despite occasional Hittite incursions; at sites such as Beycesultan, the standard 'package' of Hittite material culture is conspicuously absent (Lloyd 1972; Mellaart and Murray 1995). As in the MBA, the coastal areas were closely connected to the western and southern Aegean, sharing many similarities in terms of material culture and social practices (Mee 1998; Mountjoy 1998; Niemeier 2007; Greaves 2012). As with Minoan traits, while the appearance of Mycenaean cultural traits in Anatolia has traditionally been interpreted as colonization, it is perhaps better understood as characteristic of ongoing, low-level, intra-regional mobility. In addition to this continuing Aegean connectivity, western Anatolia was also linked into the broader networks of trade, exchange and diplomacy that spanned western Asia and the Mediterranean. The King of Arzawa appears briefly in the Amarna diplomatic archives, as does the King of Ahhiyawa, a state located somewhere in the Aegean the nature of which remains fiercely debated (Fischer 2010). Long-distant maritime routes linked the area to the rest of the Mediterranean – the Uluburun and Cape Gelidonya shipwrecks are both located off Anatolia's southwestern coast. The area also had at least one LBA trading emporium – Troy (Blegen *et al.* 1953; Blegen *et al.* 1958; Becks 2006). Although Troy was not as important a trade hub as some contemporary Levantine cities, it nonetheless was active in the shipment of bulk goods, including organic commodities like textiles (Easton *et al* 2002). Elites in this area participated enthusiastically in the 'international artistic *koine*' (Feldman 2006: 10). Finds from the Panaztepe LBA cemetery, for example, include many such internationalizing status goods and imports (Günel 1999; Çındaralı-Karaaslan 2012).

Therefore, it seems that the necessary preconditions for globalization existed in LBA western Asia. There were substantial levels of inter-regional connectivity, involving frequent and regular interactions, the dynamics of which were complex, and which were multi-directional and decentralized. Hittite Anatolia was a major player in this connectivity, heavily involved in trade networks, diplomacy and interaction. Despite this, Hittite Anatolia does not seem to have partaken in the obvious globalizing trends that characterized other parts of western Asia. Instead, it developed a specifically local idiom for status and power articulation. This development may in itself have been a reaction to increased connectivity – the conscious rejection of an external model. The situation in western Anatolia, beyond the sphere of direct Hittite control, was markedly different. Inter-regional interactions were far less regulated, as were social and cultural engagements with this interaction. A wider range of external objects and ideas were adopted, appearing in a broader set of social contexts, and evoking a greater variety of external contacts. The different responses to heightened connectivity in western and central Anatolia appears to be related to their political situations. Globalizing socio-cultural change, it seems, is contingent on the extent to which connectivity is controlled, and the range of people within society who have both access to networks and autonomy to engage with them.

Globalization and the Bronze Age

Western Asian networks of connectivity changed over the Bronze Age. At times, connectivity was weak and irregular, or local and short-distance, thereby preventing the intensity of interaction necessary for globalizing processes to occur – as in MBA western Anatolia. At other times, connectivity was strong and inter-regional, but centralized and focused on specific regions and routes, also precluding the type of interaction necessary for globalizing processes to occur – as in MBA central Anatolia. In yet other periods, connectivity was not only strong and inter-regional, but also decentralized and multi-directional, thereby creating an environment where we might find globalizing practices and behaviours – as in EBA II and the LBA in western and central Anatolia. There remain other reasons why we might not uncover evidence for globalization, however, even when all connectivity conditions are met. In addition to generic issues of preservation and the archaeological record, there may also be social, political, or cultural reasons why engagement with connectivity was constrained so that globalizing processes did not emerge – as for LBA central Anatolia. Globalization, as defined in this chapter, is a very particular phenomenon, occurring only in very particular circumstances. The case of Hittite-controlled Anatolia demonstrates that different responses to connectivity are possible, and that globalization does not occur automatically when the right preconditions are met. The question of why globalization happens remains salient for each case. However, the converse is also true – the question of why globalization *did not* happen also requires consideration. Why might some societies respond to connectivity in one way, and others in another? What is it within certain social and cultural systems that allows or even encourages a globalizing reaction to connectivity? We may understand more about what makes globalization particular by exploring its alternatives.

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9.4

Globalization and the study of the Achaemenid Persian Empire

Henry P. Colburn

An elusive empire

The Achaemenid Persian Empire was the largest political entity of its day. Founded *c.*550 BCE by Cyrus the Great, it rapidly swallowed up the Median, Lydian and Babylonian kingdoms, adding Egypt *c.*525. At its greatest extent it extended from the Indus River to the Danube, and included such disparate places as Sogdiana, Egypt, and even, for a time, Athens (Figure 9.4.1). For two centuries it was the dominant political power in the Near East and eastern Mediterranean, until its destruction by Alexander the Great *c.*330 BCE (Briant 2002).

In this chapter I consider how globalization can contribute to our understanding of the Achaemenid Empire. The archaeological study of the empire is characterized by a divide between imperial and local phenomena. This divide was perhaps best articulated by Heleen Sancisi-Weerdenburg (1990: 263) in an essay aptly named 'The quest for an elusive empire':

> The extant evidence seems to allow one to argue both for a monolithic empire as well as an amalgam of culturally distinct and politically semi-independent areas. The former position is founded on generalizations based on material from regions for which documentation is available. The second conclusion is generally derived from archaeological evidence.

This divide has long coloured studies of Achaemenid imperialism and rule. It has especially informed ideas of imperial power being weak or diffuse, or of limited imperial presence in certain regions (Root 1991). Even well-intentioned attempts to identify and articulate changes under Achaemenid rule are hampered by an apparent lack of evidence for that rule (Khatchadourian 2012: 963–65). Simply put, the absence of homogeneous material culture elements across the empire have been taken as evidence for the empire's limited impact and influence on the regions it ruled.

I argue that globalization provides a useful intellectual framework for bridging the divide identified by Sancisi-Weerdenburg. Archaeological studies of premodern globalization focus on long-distance connectivity, and on societal change (e.g. social, economic, cultural) ensuing from that connectivity (Feinman this volume; Jennings this volume). Homogeneity is but one of various forms this change can take; indeed, such change takes place in local contexts, which

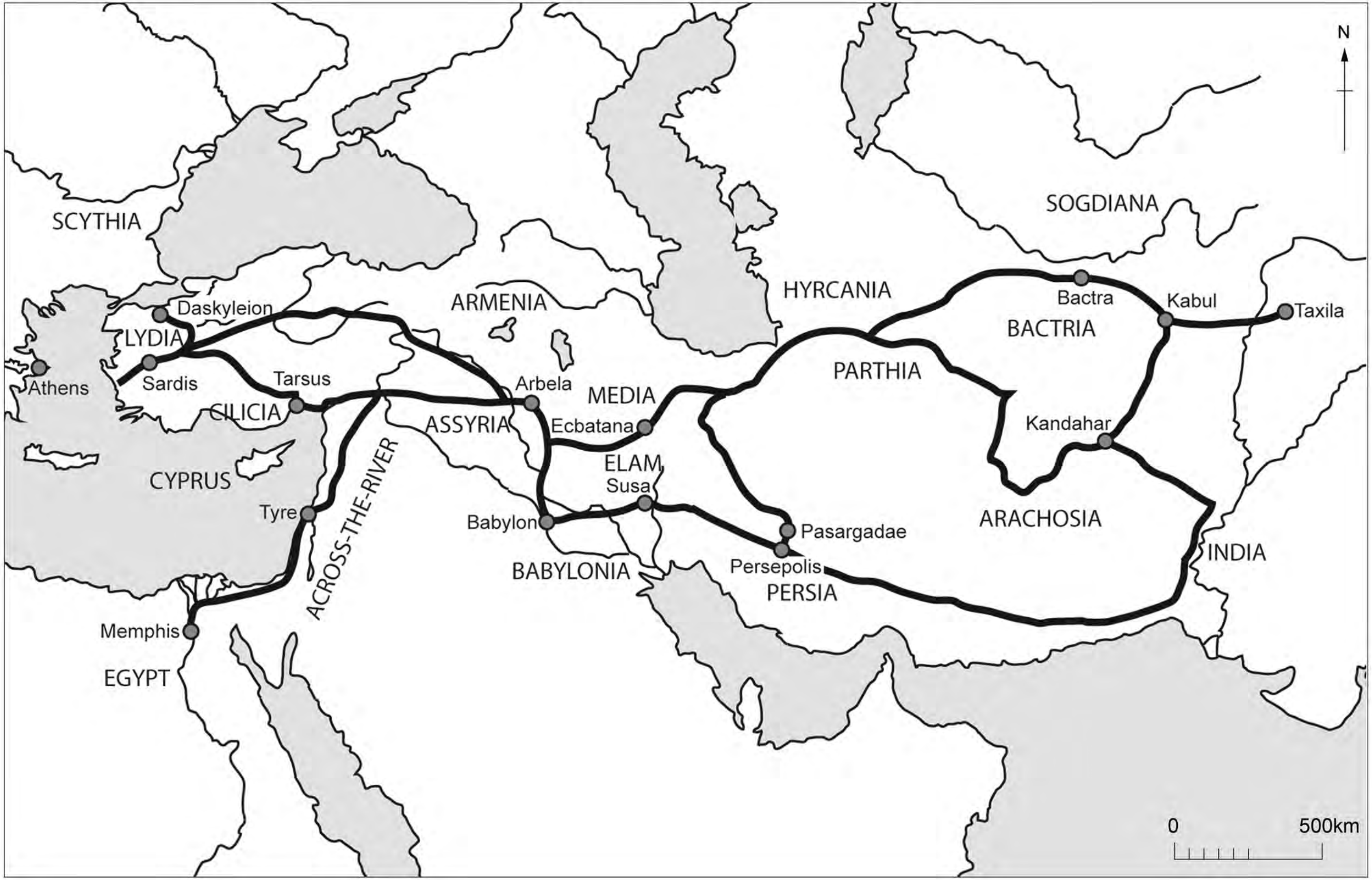

Figure 9.4.1 Map of the Achaemenid Empire, showing major sites and routes. Drawn by A.J. Renoux

invariably affect its appearance and character. This is especially relevant to the study of the Achaemenid Empire, since if the existence of long-distance connectivity in the empire can be established, we are justified in trying to understand seemingly local phenomena in the context of global processes, and we are likewise justified in identifying global phenomena in local settings. Rather than seeing homogeneous suites of material culture spreading across the empire, we find different groups of people adopting elements of a shared 'visual vocabulary' for use in their own local contexts. In globalization studies this is sometimes referred to as 'glocalization' (e.g. Nieuwenhuyse this volume), that is, an explicitly local iteration of a global phenomenon.

Thus the aim of this chapter is less to determine whether or not the Achaemenid Empire was an instance of ancient globalization than it is to use modern globalization to better understand the past. After a brief discussion of recent archaeological approaches to globalization I present the evidence for long-distance connectivity, which primarily consists of administrative measures meant to facilitate and coordinate imperial activities across the Near East. Next I consider some examples of object types that illustrate the spread of a shared visual vocabulary in the empire. These objects were used to construct identities that had both local and 'global' significance. While they do not point to the creation of a global culture, they do suggest that some people began to see themselves as part of something larger than their own local communities. This is especially interesting in light of Achaemenid imperial ideology, the subject of the final section, which emphasized both the diversity of the subject peoples, and the inclusion of those subject peoples in the project of empire. Arguably, this ideology would have reduced the pressure to assimilate to the empire's ruling class, making it all the more significant that some individuals nevertheless chose to construct their identities in global terms.

Approaching globalization in Achaemenid West Asia

Although globalization is generally thought of as a modern phenomenon encompassing the entire world, its main systemic features existed in earlier periods as well, albeit on reduced geographic scales (Feinman this volume; Jennings this volume). Moreover, the question of whether or not the Achaemenid Empire, or any other historical or archaeological phenomenon, was an instance of globalization is less important than how modern globalization can help us to better understand the past. For the purposes of this discussion, globalization is a heuristic tool that provides organizing principles for a difficult body of evidence.

The main features of globalization are an increase in connectivity on an inter-regional scale and social, cultural and economic change resulting from it (Feinman this volume; Jennings this volume). Connectivity arises from meaningful interactions between people, groups and institutions. These interactions can be meaningful either because of their frequent recurrence or because of their political, economic or social significance. In network terms, these meaningful interactions become 'ties' (Knappett this volume). In periods of limited literacy (and indeed in prehistory) these interactions necessarily took place in person or were mediated through objects. In instances of globalization the connectivity created by these interactions extended over far greater distances than before and was quantitatively greater (though not necessarily greater in terms of strength or significance).

This increased connectivity can have a range of effects that contribute to social and cultural change. Notable among these is space–time compression, which refers to a perceived reduction in geographical and chronological distance as a result of increased connectivity (Jennings this volume). In other words, it is a sense that, for practical or ideological purposes, the world has become smaller. Related to this is a trend towards standardization, in areas such as language, coinage, and units of measurement, but also in more abstract ways, such as social customs and administrative practices. Standardization of this sort facilitates the meaningful interactions that constitute connectivity, and like time–space compression has the effect of making distant people and places seem less foreign.

Another prominent feature of globalization, and perhaps the most widely recognized, is homogeneity (Jennings this volume). As discussed above, time–space compression and standardization facilitate interactions between geographically distant people and institutions. One effect of this is the dissemination of a shared visual vocabulary. When new objects and images are introduced to a region as a result of meaningful interactions they effectively expand the existing repertoire of visual forms. Furthermore, since the networks created by these interactions are often dominated by certain groups or regions (Jennings this volume), certain objects and images are more likely to be disseminated and adopted on a widespread basis.

In searching for evidence for the effects of globalization it is also important to consider scale (Feinman this volume). As Michael Kearney (1995: 548) has noted, globalization 'refers to social, economic, cultural, and demographic processes that take place within nations but also transcend them, such as that attention limited to local processes, identities, and units of analysis yields incomplete understanding of the local'. In other words, the societal changes ensuing from increased long-distance connectivity can have different forms in different contexts. Imported images or object types can have local meanings assigned to them (Hodos 2010: 23–25; Boozer 2012). Thus globalization can contribute to heterogeneity as well as homogeneity (Jennings this volume). So studies of globalization need to examine local phenomena in their global context, and global phenomena in their local context.

Archaeological evidence is usually illustrative rather than probative. This is especially true of the Achaemenid Empire, given the historiographic difficulties alluded to at the beginning of this chapter. So while long-distance connectivity cannot always be demonstrated, the potential for it can be, especially in the form of infrastructure, institutions and administrative measures that facilitate movement and communication. Also, the evidence for cultural change is generally discernible in local contexts rather than empire-wide trends. This is due in part to uneven coverage of the empire by archaeologists; the Achaemenid period is better understood in some regions, especially in the western half of the empire, than it is in others. It is important to recognize as well that the empire's ideology emphasized diversity rather than homogeneity, which may also have affected how people throughout the empire made use of non-local material culture and social practices.

Long-distance connectivity

In order to control its vast geographical extent, the Achaemenid Empire employed several strategies for linking together distant places. These included the establishment of a network of roads and storehouses, a mounted relay postal system, the use of Aramaic as an administrative language, and the standardization of the calendar. These measures created the potential for long-distance connectivity by reducing the uncertainties of travel within the empire, and also facilitated interactions between people in different parts of the empire by creating some basic common ground. It is important to note as well that while many of these features had existed in earlier West Asian political entities, the Achaemenid Empire used them on a much greater geographical scale than ever before, to link together a much wider array of subject peoples.

The Achaemenid road network (Graf 1994; Colburn 2013; Figure 9.4.1) is best known in the western regions of the empire, where it has excited the interest of Classical authors and modern scholars alike. The tablets of the Persepolis Fortification Archive, especially those recording the disbursement of travel rations, attest to movement throughout the empire as well. These roads were built, maintained and guarded by imperial officials. They were furnished with way stations at regular intervals, where travellers could procure supplies. For example, an Aramaic document (Porten and Yardeni 1986–99: no. A6.9) written on leather parchment by the governor of Egypt, Arshama, authorizes his subordinate Netihor to draw rations at several places along the road to Egypt through northern Mesopotamia and Syria–Palestine. Texts recording the disbursements of travels rations from Persepolis, Idumaea and Bactria suggest that roads throughout the empire were similarly provisioned (Briant 2012). The stations were positioned at intervals averaging 24 km, spaced approximately a day's journey apart by foot (Colburn 2013: 37–38).

These roads allowed the easy movement of people and goods from one region of the empire to another by mitigating some of the uncertainties of long-distance travel. They were no doubt intended primarily to meet the needs of the empire, such as the mustering and deployment of armies or the transport of tribute payments, but in doing so they certainly created opportunities for interactions and ensuing connections. The Persepolis Fortification Archive attests to the movement to and from Persepolis of crews of workmen and women from across the empire, each labelled with an ethnonym indicating its geographic origin (Briant 2002: 429–39; Henkelman and Stolper 2009). In one instance the Archive indicates that between 502 and 498 BCE crews of Thracians, Egyptians, Lydians, Bactrians and Cappadocians were all dispatched to Tamukkan, a town in the Bushehr peninsula on the Persian Gulf coast (Henkelman 2008: 308–09). During this five-year period there must have been many opportunities for interactions between these different groups. There were also more permanent relocations, both voluntary and involuntary, that created resident populations of foreigners in various cities and regions of the empire: there were communities of Carians in Borsippa (Waerzeggers 2006), Cimmerians, Phrygians, Urartians, Lydians and Indians in Nippur (Stolper 1985: 72–79), Egyptians in Susa (Zadok 1992: 145–46), and Jews and Aramaeans in southern Egypt (Porten 1968), to name a few.

The roads also made it possible for high-speed communication to take place over long distances. The empire established a relay postal system that employed mounted couriers (known in Elamite by the term *pirradazish*). The system operated in a manner similar to the Pony Express of nineteenth-century America. The similarity is close enough that one can use the Pony Express to estimate the top speed for imperial communication (Colburn 2013: 41–47). The estimate suggests that a *pirradazish* could cover approximately 230 km per day. This means that information could travel between Persepolis and Susa in a matter of days, and between Persepolis and Memphis in under two weeks. Most communication would have been somewhat slower, especially in the absence of stirrups or horseshoes. But the combination of an extensive road network and the *pirradazish* system meant that vital information and orders could be transmitted throughout the empire in relatively short order.

The empire further facilitated inter-regional communication through the employment of Aramaic as an imperial *lingua franca*. Aramaic was already in use as a *lingua franca* in the Neo-Assyrian Empire, and it was retained in the Achaemenid Empire as the medium of long-distance communication, both within and outside of the empire. This is best attested by the correspondence of Arshama (Porten and Yardeni 1986–99: nos. A6.3–16; Tuplin and Ma 2013). Arshama was frequently absent from his province, and on these occasions he issued orders to his subordinates by means of Aramaic letters written on leather parchment. The Persians used Aramaic for diplomatic communication with the Greeks, including even the Spartans, who were famed in antiquity for their isolation and xenophobia (Thucydides 4.50). It was also used in Egypt and at Persepolis in administrative contexts, and even to disseminate imperial propaganda, as suggested by the fragmentary Aramaic version of Darius' Bisitun inscription found at Elephantine at the southern border of Egypt (Greenfield and Porten 1982). Aramaic thus served as a medium of communication in multilingual settings, allowing people from across the empire, and even outside of it, to interact with each other.

The Persians also sought to standardize the Babylonian calendar, which was the most widely used calendar in the empire. In addition to Mesopotamia, its use is attested in Egypt, Palestine, Asia Minor and Bactria, and the Elamite and Old Persian calendars used at Persepolis were assimilated to it. The Babylonian calendar was a lunar calendar, and thus required the insertion of intercalary months in order to remain properly aligned with the seasons. In earlier times these intercalations were made at the discretion of the king, and thus word of them had to be disseminated to outlying areas in order for the calendars to remain in sync. During the reign of Darius, however, a fixed 19-year cycle was established (Stern 2012: 105–23). This effectively standardized the calendar throughout the empire, making it possible to coordinate imperial activities across great distances.

These measures enacted by the empire in order to better administer and control its territory also created the potential for long-distance connectivity. The use of Aramaic permitted people across the empire to speak to each other and engage with administrative entities with less need for intermediaries such as translators. The standardization of the calendar reduced the complication of moving between different timekeeping systems. And the road network and postal system contributed to time–space compression by making distant places less distant from a practical standpoint. Furthermore, the movement of people and the populations of resident foreigners in various cities and regions of the empire contributed to deterritorialization by making these places more cosmopolitan and multi-ethnic.

Homogeneity and diversity

The extent to which the long-distance connectivity discussed in the previous section led to social and cultural change in the Achaemenid Empire is difficult to determine archaeologically. In particular, there is little evidence for the dissemination of homogeneous material culture across the empire. One reason for this is that research on the empire has focused primarily on its western provinces, and generally on earlier or later periods. Also, global phenomena and processes have distinctly local effects, which can result in heterogeneity as well as homogeneity (Jennings this volume). Thus examination of local contexts is important for studying globalization in the empire. Indeed, there is a discernible spread of a shared visual vocabulary in the empire, which was nevertheless deployed primarily using local material culture traditions and systems of meaning (Root 1991: 10–13).

One example of this shared visual vocabulary is jewellry – mainly bracelets, armlets and torques – featuring protomes in the form of animal heads or foreparts, including those of ibexes, calves, lions and mythical winged creatures. The reliefs on the Persepolis Apadana show members of several delegations, including the Medes, Syrians, Ionians, Indians, and the Saka Tigraxauda, carrying rings with animal protomes (Figure 9.4.2). It is not clear what type of object these are meant to be, since their size might be exaggerated for the sake of legibility (Root in press). But since they are carried by multiple delegations they are clearly not a regional object type. Rather, their use in this context suggests they are symbols of unity.

A number of examples of these types of jewellry are extant (Rehm 1992: 14–40; Curtis 2005); unfortunately, most are unprovenanced. Though this material is not useful for studying the distribution of these jewellry types, it is nevertheless shows that a significant quantity of it was produced. There are, however, some excavated examples recovered from burials. One of these burials is at Susa (Tallon 1992), one of the major cities of the empire where the king frequently held court. This tomb contained two gold bracelets and one torque with lion

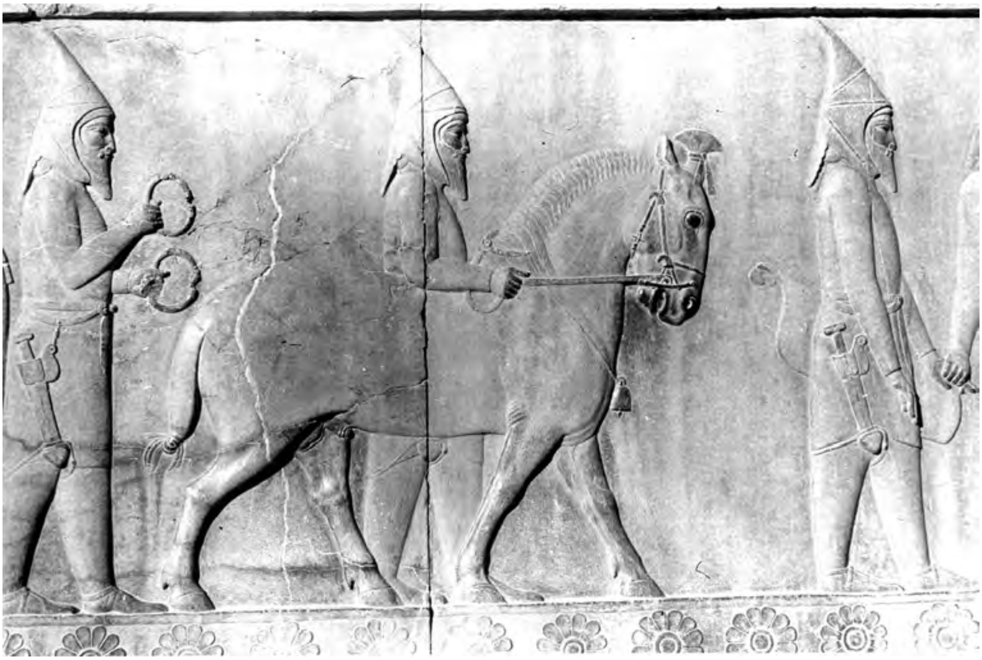

Figure 9.4.2 Relief showing the Saka Tigraxauda, east façade of the Apadana, Persepolis, *c.*500 BCE. Photograph by M.C. Root

protomes. A gold bracelet with lion heads was found in one of the latest tumulus burials at Gordion (Sams 1979: 12; Figure 9.4.3), and two gold bracelets with lion protomes were found in a tumulus near Sardis (Özgen and Öztürk 1996: no. 111). Two more tombs, located at the site of Hacınebi overlooking the Euphrates in south-eastern Turkey, feature silver and bronze bracelets and anklets with horned animal heads, including two ibexes (Stein 2014: 268–72). At the nearby cemetery at Deve Hüyük several bronze bracelets with bovine heads were found (Moorey 1980: 77–78).

There are also some examples of jewellry with animal protomes in other media, including a tomb painting in Lycia (Mellink 1972: 266), and on Egyptian statues. Most notably, the well-known statue of Udjahorresne, originally from Sais in the Nile Delta, wears a bracelet with lion protomes (Colburn 2014: 288–90). According to the statue's hieroglyphic inscription, Udjahorresne was a high-ranking official in Egypt under the Egyptian kings Amasis and Psamtik III and under the Persian kings Cambyses and Darius (Kuhrt 2007: 117–22). He designed the Egyptian language titulary for Cambyses, and he spent time at the court of Darius before returning to Egypt. The inscription also states that 'I [Udjahorresne] was a learned man for all lords; my character was judged good by them. They gave me gold ornaments' (Kuhrt 2007: 119). The reference to gold ornaments must mean his bracelet, which is implied to be a gift from the Achaemenid king. At the same time, there is a long tradition, going back to the late Old Kingdom, of Egyptian kings giving gold objects to honoured subjects, and of the recipients of these gifts recording the honour in inscriptions and other personal monuments (Moyer 2006: 245–47). Thus Udjahorresne reinterpreted his bracelet, a sign of royal favour in the Achaemenid world, in an Egyptian context. Indeed, this type of statue, a *naophorous* or shrine-bearing statue, has a very specific theological meaning in Egyptian thought (Klotz 2014).

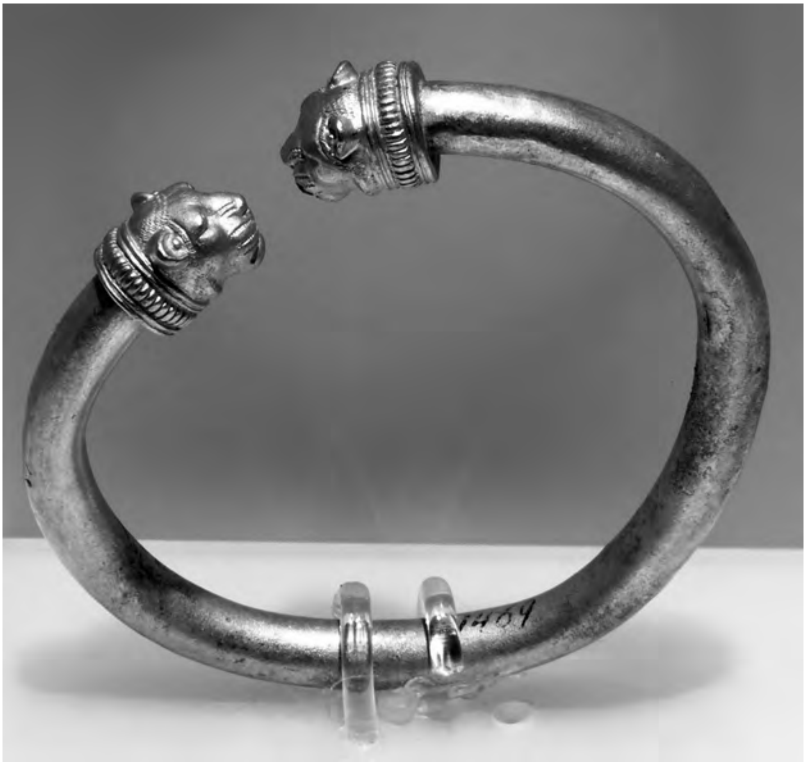

Figure 9.4.3 Gold lions' head bracelet (15 J 1), Tumulus A, Gordion, *c.*530–525 BCE. Photographed by G. Bieg.

For Udjahorresne, this bracelet signified his connection to the Achaemenid king and his participation in the project of empire. The individuals buried at Susa, Gordion, Sardis, Hacınebi and Deve Hüyük did not necessarily have similar such personal relationships with the king, but the inclusion in their tombs of objects implying such connections is suggestive of their perceived stations in life. The bronze examples from Deve Hüyük further show that jewellry of this sort was also used by non-elites, illustrating how the shared visual vocabulary of the empire was employed across different social strata. All of these people considered these objects to be important markers of their identities as participants in the empire, so important as to take them to the grave. They constructed their respective identities in globalized terms, and the material culture they used to do so was informed by empire-wide processes rather than strictly local ones. Yet the statue of Udjahorresne was part of an explicitly Egyptian representational practice and made to serve a specific theological purpose. This was Udjahorresne's primary concern in fashioning this statue; the global element of his identity is of secondary importance.

The bracelet on Udjahorresne's statue presents an example of what is sometimes called 'glocalization,' that is, a local interpretation of a non-local or global phenomenon. This is significant concept for the Achaemenid Empire, since in some instances the social and cultural conditions in a certain region create a uniquely discernible interaction with global processes. One example of this is in the highlands of Armenia, where several columned halls were built within or beside old Urartian fortresses (Khatchadourian 2013; Figure 9.4.4). Columned halls

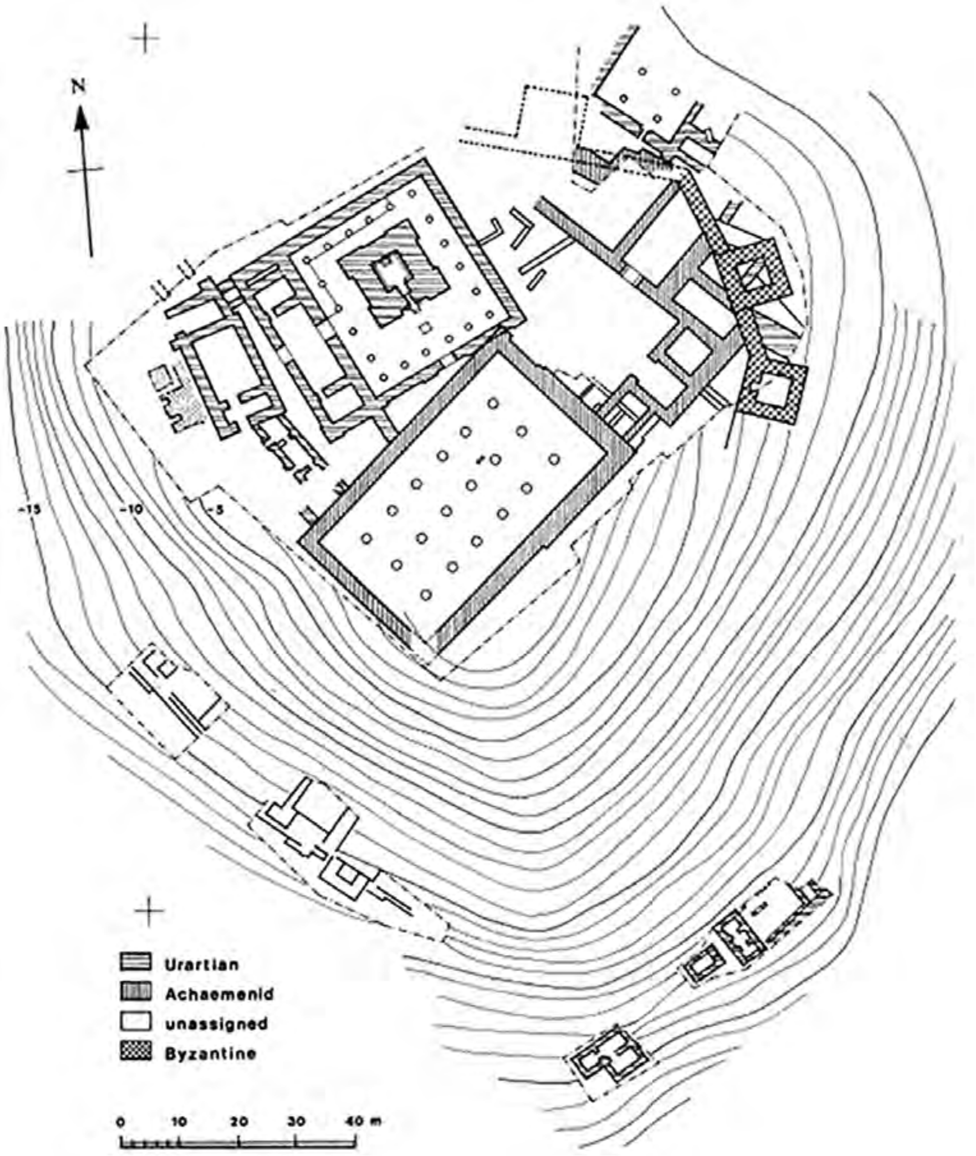

Figure 9.4.4 Plan of the Urartian fortress and columned hall at Altıntepe, Turkey. Source: Summers 1993: figure 2. Used with permission

of this sort are unknown in Urartian architecture, but they are a prominent feature of major Achaemenid sites such as Persepolis, Pasargadae and Susa, where they served as an architectural rendering of the empire's ideology of inclusion and participation (Root 2015). Khatchadourian (2013: 136) attributes the construction of the Armenian halls to local rather than imperial agency, arguing that 'by using the columned halls . . . highland authorities participated to some degree in the reproduction of what had become an institution of Achaemenid political culture, albeit inflected by aspects of their own worldview.' The construction of these halls within the walls of old Urartian fortresses linked these former highland structures of authority to new, imperial ones. Furthermore, several more columned halls were built in this region, but at sites without Urartian fortresses (Knauss 2006; Knauss *et al*. 2013). The implication is that the adoption of this building type was a widespread phenomenon in this region. If, as Khatchadourian has proposed, these halls were constructed by local elites, they represent efforts by those elites to express their statuses in global terms.

In some cases it is even possible to identify the spread of certain social practices along with the shared visual vocabulary of the empire. For example, there are distinctive forms of the ‘Achaemenid bowl’, characterized by a carinated shoulder and everted rim. They appear at Persepolis on the Apadana reliefs, where they are carried by various subject peoples, and versions of them made of metal and ceramic have been found in various parts of the empire, including Egypt, Palestine, Cyprus and Anatolia (Dusinberre 1999). Images of these bowls in use suggest that the practice of holding them on one’s fingertips while drinking also spread across the empire (Miller 2011). This was most likely the manner of their use at the royal court (cf. Xenophon, *Cyropaedia* 1.3.8), and the adoption of this practice signalled one’s familiarity with or connections to (real or imagined) the king and the social centres of the empire. Furthermore, the existence of ceramic versions of these bowls further suggests that their use extended to a wide segment of the empire’s population, like the jewellry discussed above. And the persistence of this type in ceramic and metal ware corpora, in such disparate places as Egypt (Colburn in press) and Gandhāra (Petrie *et al*. 2008), after the fall of the empire attests to the degree to which these bowls had become engrained in local cultural systems.

It is important to recognize as well that the shared visual vocabulary did not originate exclusively in the Achaemenid royal court. For example, images of the Egyptian god Bes, usually depicted frontally as a bearded, bandy-legged dwarf, occur in a wide variety of media across the empire (Abdi 1999, 2002). These include seals and seal impressions, coin types, *stelae*, architectural fragments, and figurines. The significance of this phenomenon is uncertain; Bes does not seem to be connected directly with Achaemenid imperial ideology or religion. But his spread throughout the empire was certainly a consequence of the long-distance connectivity created by the imperial administrative measures discussed earlier.

The spread of a shared visual vocabulary and social practices did not necessarily lead to the creation of a ‘global culture’ per se, but it did create certain commonalities between previously less-connected groups of people, and over greater distances than before. These commonalities were greatest among social elites, who were most likely to have trans-regional connections, or pretensions thereof, and many of whom held positions of authority within the imperial administration. These elites have been described as the ‘international elite’ of the empire (Weinberg 1999), and some of them, such as Udjahorresne, Themistocles, Ezra and Nehemiah, are identifiable by name in various textual and epigraphic sources. Other people, such as the soldiers, military colonists and crews of workmen, also no doubt adopted aspects of the visual vocabulary or social practices that they encountered while moving across the empire on imperial business.

Achaemenid imperial ideology

The difficulties in identifying clear examples of shared material culture and practices across the empire may result in part from the character of Achaemenid imperial ideology. This ideology is best understood from its visual articulation in the decorative programme of the palace complex at Persepolis and the royal tombs nearby at Naqsh-i Rustam (Garrison 2013; Kuhrt 2010; Gates-Foster 2014: 182–86). These structures have reliefs illustrating the diversity and breadth of the empire’s subject peoples by showing examples of these peoples dressed in distinctive clothing.

For example, the Saka Tigraxauda are shown wearing the pointed caps for which they were known (Tigraxauda means 'with pointed hats'). These are not necessarily accurate representations of the clothing worn by the peoples of the empire, but they are meant to indicate that each group is distinctive and separate from the others. Achaemenid imperial inscriptions similarly give varying lists of subject peoples (Cameron 1973), also meant to illustrate the empire's vast reach. The trilingual cuneiform inscription on the tomb of Darius at Naqsh-i Rustam connects the images of subject peoples with the empire's reach:

> If you now should think 'how many are the countries which King Darius held?' look at the sculptures of those who bear the throne, then shall you know . . . the spear of a Persian man has gone forth far . . . a Persian man has delivered battle far indeed from Persia.
>
> *(Kuhrt 2007: 503)*

At the same time, Achaemenid ideology also emphasized inclusion and participation on the part of these subject peoples. On the façade of the Apadana at Perspolis the subject peoples are being led by the hand; some are armed, and most are carrying animals or objects, interpreted as gifts. The entire scene can be read as a microcosm of the empire in which the subject peoples voluntarily submit to the king and willingly participate in the project of empire (Root 1979: 227–84). The participatory metaphor is even more blatantly deployed in the case of the 'throne-bearers' portrayed on the Central Building and Throne Hall at Persepolis, and on the tombs at Naqsh-i Rustam. Here the subject peoples (along with a Persian) are shown with their hands raised above their heads as if they are holding up the platform on which the king sits (or stands). The implication seems to be that all of the peoples of the empire played a role in supporting the king (Root 1979: 131–61). Texts such as the so-called 'Foundation Charter' inscription from Susa expresses a similar idea by describing the construction of a palace there as the result of an effort by artisans drawn from across the empire (Root 2010: 178–86).

The combination of diversity and inclusion in Achaemenid ideology arguably reduced any pressure for conformity or assimilation (Gates-Foster 2014). There may well have been social or political advantages to adopting new material culture and practices, but from an ideological standpoint the empire was concerned explicitly with uniting many different peoples. Because these differences played a significant role in imperial ideology, there may have been some motivation for subject peoples to retain local forms and practices, at least in certain contexts. In fact, Achaemenid royal power was presented in local idioms whenever possible. This is best documented in places like Babylonia (Waerzeggers 2015) and Egypt, where Achaemenid kings were represented as pharaohs in certain key contexts, such as on *stelae* commemorating the death of the Apis bull (Colburn 2014: 120–29). In light of these ideological considerations it is all the more striking that certain individuals in the empire did indeed employ a shared visual vocabulary in the construction of their identities, in a manner that is discernible today. It is quite possible that had the empire survived longer such identities would have become more prevalent. But the tension between connectivity, created by administrative measures, and ideology, stressing the empire's diversity, seems generally to have been resolved in favour of the latter. Indeed, the Achaemenid ruler's claim to be a uniquely privileged figure – the King of Kings no less – in the social order of the Near East, relied on it being thus (Kuhrt 2010: 92–93).

A connected empire

The search for features of globalization in the Achaemenid Empire puts the divide between local and imperial phenomena identified by Sancisi-Weerdenburg in a new light. The empire was geographically very large, so the Persians implemented administrative measures resulting in space–time compression and standardization to make it functionally smaller and therefore easier to govern. These measures also created the potential for long-distance connectivity on an unprecedented scale. It is difficult to characterize this connectivity, since much of the evidence for movement and communication relates only to official business. But it did lead to the dissemination of a shared visual vocabulary throughout the empire that was employed by certain individuals to construct their identities in non-local terms. This vocabulary did not supplant local traditions; rather, it augmented them, permitting these individuals to construct their identities in non-local terms if they so wished. Its deployment was frequently embedded in local representational practices, making it difficult to discern archaeologically. Moreover, Achaemenid imperial ideology was at pains to emphasize the diversity and breadth of the empire, and there was thus relatively little impetus for subject peoples to adopt aspects of Persian identity.

The Achaemenid Empire, then, is a case in which the long-distance complex connectivity necessary for globalization was present, but did not lead to widespread cultural change. According to the criteria articulated by Jennings (this volume), this disqualifies the empire from being an example of globalization per se, even though several features of globalization, such as space–time compression, standardization and even deterritorialization can be identified. This might seem an unsatisfying conclusion, but it is nevertheless an important statement about the nature of Achaemenid rule. It suggests that the long-distance connectivity in the empire, though certainly regular (if not frequent) and meaningful, was not necessarily strong. This does not mean the empire was weak or disconnected; as Knappett (this volume; following Granovetter 1973), points out, weak ties can be very powerful. Arguably, the emphasis on diversity in Achaemenid ideology indicates that these ties were left deliberately weak, since the creation of a single, albeit massive, cultural entity would undermine the significance of titles like 'King of Kings,' and thus run contrary to Achaemenid cosmology (Kuhrt 2010; Gates-Foster 2014: 182–86). And, as the shared visual vocabulary in the empire shows, certain individuals were nevertheless quite able to navigate these connections, and were profoundly affected by doing so.

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9.5

Lapis Lazuli, Homer and the Buddha

Material and ideological exchange in West Asia (*c*.250 BCE–200 CE)

Rachel Mairs

Introduction

> Timanthes engraved this starry lapis lazuli, a gold-speckled Persian semi-precious stone, for Demylus, as a gift for dark-haired Nikaia, from Kos, in return for a tender kiss.
>
> *(Poseidippos,* Lithika*, trans. R. Mairs)*

Poseidippos of Pella was a Greek poet resident in Alexandria, Egypt, in the third century BCE. In 2001, a papyrus containing 112 previously lost poems was recovered from the wrappings of an Egyptian mummy in Milan (Gutzwiller 2005). Among these, we find an epigram about a piece of lapis lazuli, worked and offered as a lover's gift to a dark-haired girl from Kos, in return for a kiss. Whether Nikaia is a courtesan or the girl next door, lapis is a commodity, part of a transaction involving two things from distant places, both of which are precious to the giver. 'She has come to dwell in a world where royal women, non-royal women, and the beautiful gems they own reflect one another as equivalent aesthetic objects' (Kuttner 2005: 301).

To the poet, lapis lazuli was an exotic commodity, which he describes as Persian in origin. As it happens, we are able to trace the path of this very piece of lapis back to its source in the mountains of Badakshan, eastern Bactria, the only exploited source of the mineral in the ancient world (Bernard and Francfort 1978: 49–51). Bactrian lapis had been moved between Central Asia and the Mediterranean as early as the Egyptian Predynastic period, in the mid–late fourth millennium BCE (Bavay 1997). By the early Hellenistic period, the time of Poseidippos, émigré Greeks were involved in its large-scale extraction and transportation. At the Hellenistic city of Ai Khanoum, in eastern Bactria, the city's treasury was, at the time of its abandonment in the 140s BCE, the storage place of around 75 kg of unworked lapis from the mines in the mountains upstream (Bernard and Francfort 1978: 9; Rapin 1992: 50, pl. 100.2).

In 2006, a collection of objects from the National Museum in Kabul, including pieces from Ai Khanoum, began a lengthy journey through the museums of western Europe, North America and Australia (Cambon and Jarrige 2006; Hiebert and Cambon 2008). Afghanistan was marketed as the 'Crossroads of the Ancient World', and much was made of the central

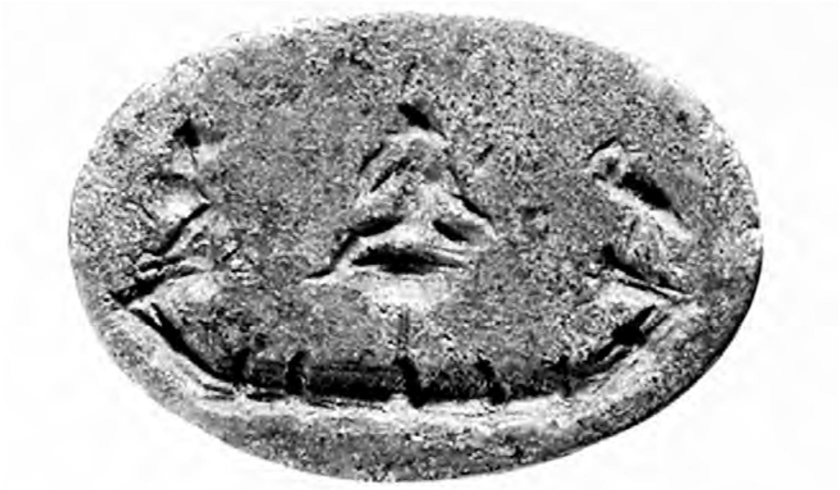

Figure 9.5.1 Lapis lazuli intaglio depicting Harpocrates © The Metropolitan Museum of Art, accession number 10.130.1389

geopolitical position of the region in antiquity and the present day (Hiebert and Cambon 2011). In gift-shops such as that of the Metropolitan Museum of Art in New York, visitors to the exhibition could buy their own pieces of modern lapis reworked in the ancient forms of replica jewelry. On their way to the gift-shop, they might examine other pieces of ancient Bactrian lapis in the Metropolitan's permanent collections, such as an intaglio of the second century CE, from Roman Egypt, representing the syncretic Greek–Egyptian god Harpocrates in a papyrus boat (Bonner 1950: 286, no. 199, pl. 9; Figure 9.5.1).

The purchaser (or recipient) of a reproduction bracelet from the 'Afghanistan: Hidden Treasures' collection might, unknowingly, wear on her wrist lapis from the very same mines as the original pieces in the museum display case. In 2007, the English service of the Qatar-based international news network Al Jazeera produced an article on 'The lure of Lazuli' (www.aljazeera.com/news/asia/2007/10/, accessed 30 April 2014). An accompanying video on the Al Jazeera YouTube channel revealed the perils faced by miners at Sar-i-Sang, site of the ancient lapis works (www.youtube.com/watch?v=pwyc5uRxvYE, accessed 30 April 2014). The Al Jazeera report uses lapis to tell a different story of global connectivity, that of war, economic problems and terrorism in modern Afghanistan, and the repercussions for a wider, globalized world.

I offer this series of vignettes on the movement and commoditization of lapis lazuli in the ancient and modern worlds to show not just that distant regions of the ancient world were interconnected, but that present-day interconnections may reproduce the same routes and objects of transfer. Poseidippos knew lapis as an exotic 'Persian stone'. Bactria had, indeed, not many decades before, been a province of the Persian empire, the Greek world's eastern, foreign neighbour, its traditional antithesis and rival. Lapis is introduced (and exoticized) to the modern museum visitor as part of a narrative about ancient connections between Afghanistan and the Mediterranean. The finds at Ai Khanoum have illuminated the important role of lapis in the economy of a colonial Greek city foundation. At the mines of Sar-i-Sang, workers in the informal sector risk their lives to extract lapis, which in the 1980s had been used to fund the war of the mujahideen against the Soviet invaders of Afghanistan. In Poseidippos' epigrams on lapis, and other stones, a Greek poet, in Greek, addresses fellow Greeks in Egypt. In the Al Jazeera report, an English journalist addresses an international audience, in English, through a Qatari broadcaster, uploaded onto perhaps the greatest facilitator of global connectivity, the World Wide Web. In all of these cases, the global is bound up with the local. Long-distance connections and communication have local repercussions, and may drive and direct local economies (Robertson this volume).

The local and the global

Lapis, a brightly-coloured material of no actual utilitarian value, with its glinting pyrite ('fool's gold') inclusions, circulates as an object of – and means of expressing – human desire. This chapter is not principally about lapis, but I have taken it as a rhetorical starting point because its movement and commodification may be traced so clearly in the archaeological and literary records. It also shows how ideas and cultural associations can travel alongside objects. My focus is on the circulation of less tangible things, whether ideas and ideologies, or commodities which have not survived well in the archaeological record, and how these – like lapis lazuli – indicate complex interactions between the global and the local. My geographical remit is Hellenistic and Roman-period West Asia – with its connections to the eastern Mediterranean, north-east Africa, Arabia, Central Asia and India. Within this vast area I have had to be selective, and draw my case studies from a few important nodal points along the maritime and overland routes that linked the whole of this region together. There are many others that I could have chosen, but the ones I have selected are the Buddhist religion, Indian textiles and the story of the Trojan War.

Some have claimed that globalization is an exclusively modern phenomenon. Tomlinson, for example, argues that the capacity of ancient political structures to dominate large territories was not matched by their ability to integrate populations, culturally or politically (Tomlinson 1999: 36–37). Archaeologists and ancient historians have been inclined to disagree, and to argue instead that 'human connectivity across broad spatial domains has a deep history' (Feinman this volume). The trope of globalization has also attracted the over-enthusiastic (for example Liebert 2011), and it is important, as Jennings reminds us in his chapter in this volume, not to assume globalization as a universal phenomenon in past societies. The term 'globalization' must be used with care.

Much of the material I discuss here has already been viewed through several successive theoretical prisms. So a case must be made for why globalization provides a more productive framework within which to explore ancient interactions. A number of recent studies have seen globalization as a potentially useful successor to problematic tropes such as 'Romanization' (a term which, despite its many deficiencies, refuses to die: see the discussion in *Archaeological Dialogues* 21.1, 2014), in examining the movement of people, objects and commodities (Hodos 2010: Sicily; Sweetman 2007: Knossos; Panagopoulou 2007: 327–29, on 'Objects in motion'). Other studies seek to demonstrate that the tension between global integration and regional cultural diversity in the ancient world provides a meaningful comparison for modern global networks and the local reinventions of 'global' products and traits that they produce (Hingley 2005: 2, 41, 111; Miller 1998). It is this feature of 'glocalization' (Holton 1998: 16), in particular, that I would like to pursue through my case studies. In these, I sketch the directions and mechanisms of long-distance contact around the Mediterranean, north-east Africa, West Asia, Central Asia and South Asia. These networks extended across seas, deserts and mountains, and had numerous points of transshipment. An item and its original meaning – even knowledge of its context of production or extraction – did not always travel together from one node of a network to another (e.g. Gosden and Marshall 1999). Where goods from diverse points of origin are found in a single archaeological context, we also have the opportunity to consider the creation of what we might call a 'global culture' (Jennings 2011: 28–33), one characterized by the receipt of products and influences from across wide networks, and the reception and reinvention of these in local cultural contexts.

Buddhism, silk and Trojan horses

The period contemporary with Hellenistic and Roman domination in the eastern Mediterranean and West Asia was one of intensive and extensive cultural and economic exchange. The notions of interconnectivity and innovation associated with globalization provide a more productive angle of approach to this interaction than do, for example, models of centre–periphery relations. In the networks that I shall go on to explore, there is no centre, and no periphery. There are also no transit points that are not themselves intimately involved as producers, consumers and reinventors of things and ideas. In these, we may see the 'cultural entanglements created by constant mobility and connectivity' (Knappett this volume).

Long-distance connections in the ancient world are conceptualized in the popular imagination as 'routes', with a start and an end point. One might think, for example, of the Silk Road, or the Indian Ocean maritime routes (reconceptualized as parts of global networks by Boivin *et al*. 2012; Ball 2000: 133–39). Indeed, our ancient sources often encourage us to think in terms of people and goods undertaking a single, one-way journey along a fixed trajectory. We even have the name of an ancient Marco Polo. A Macedonian named Maes Titianus was said to have travelled as a merchant as far as the *Lithinos Purgos* 'Stone Tower' (Tashkurgan, in the Pamir mountains) at a period unknown (Claudius Ptolemy, *Geography* 1.11.7). He did not himself travel to the land of the Seres (Chinese), but sent others. We do not know the story of Maes in any greater detail than this – Ptolemy is interested only in the distance to the Stone Tower, not the person who measured it – but this name among the many nameless travellers of the ancient world has proven intriguing to commentators (Cary 1956; Bernard 2005a).

Another textual source offers a more appropriate context for the history (such as it is) of the merchant Maes Titianus. The *Periplus of the Erythraean Sea* (first century CE) is a practical manual to travel and trade in the north-western Indian Ocean, from the Red Sea and Persian Gulf, to the coasts of Arabia, Africa and India (Casson 1989). The anonymous author, writing in Greek, provides information about the types of goods exchanged at different entrepôts along the way, and the land connections that intersect with the network of maritime routes. The world conceptualized by the author of the *Periplus* is close to what we might think of as a 'globalized' one. People, goods and ideas move along multiple, intersecting trajectories. A piece of metal which began its life as ore in a Roman silver mine in Cyprus or Gaul, extracted by indigenous miners under Roman management, might be struck as a coin depicting a Roman emperor, and shipped to India, via Egypt, where its value was as bullion (Sidebotham 1986: 28). In the following discussion, I shall explore three 'commodities' (in the broadest possible sense) which moved through networks such as these: the Buddhist religion, Indian textiles and the story of the Trojan War. These examples show how historical, epigraphic and archaeological evidence can come together to reveal more about long-distance connectivity than any one genre of evidence could on its own. My discussions of these commodities are intended to give only a flavour of the types of things which might move across long distances in the ancient world. The main course, in the following section, is a more detailed analysis of one specific assemblage, from Begram in Afghanistan, which contained goods from the Roman Empire, India and China.

Much discussion of religious interaction in the Hellenistic world focuses on the reception and reinvention of gods in new environments, whether these gods be Greek, Egyptian, Babylonian, or of whatever origin. The concept of active religious proselytization is one which many would associate with one syncretic Graeco-Roman cult in particular: early Christianity. Buddhism provides another example, but of an attempt at proselytization that never quite succeeded. Attempts were made in the third century BCE to spread Buddhist teachings to Greek communities and Greek courts, targeting these constituencies directly and specifically. This missionary activity took place within the same context of population movement and diplomatic contact that encouraged the contemporary movement of commodities and cultural practices. It is of particular interest in the present context because the evidence for Buddhist proselytism shows the reception of Greek language and ideas in India, and their adaptation by Indians to communicate Indian ideas back to Greeks. Those who doubt the existence of globalization phenomena in the ancient world might find their conviction shaken by a long-distance, complex, intercultural, multidirectional ebb and flow of information such as this.

Alexander the Great's new foundation of an 'Alexandria' at Kandahar in 330–329 BCE was, as typically of his efforts in this direction, nothing of the sort. There had been a city at the site of Alexandria in Arachosia for several hundred years (on the archaeological literature, see Mairs 2011: 35). Alexander's conquest did, however, bring one important addition to the cultural mix at Kandahar: a Greek immigrant population (Bernard 2005b; Fraser 1996: 132–40). In 302 BCE, the region of Arachosia passed out of Greek political control, after being ceded by Seleukos I to the Indian emperor Chandragupta Maurya (Strabo 15.2.9; Appian 9.55; Plutarch, *Alexander* 62.4).

The third-century strata at Old Kandahar have not been thoroughly investigated (McNicoll and Ball 1996; Helms 1997), but inscriptions attest both the continued presence of a Greek-literate community, and the impact of Mauryan control. Two Greek inscriptions (one a Greek–Aramaic bilingual) belong to the great corpus of inscriptions left by the emperor Aśoka throughout his empire, from southern India to the north-west. These edicts proclaim his personal conversion to Buddhism, and his intention to convert his diverse subjects to Buddhist values and practices. He uses the analogy of military conquest to describe his hoped-for conquest of the hearts and minds of his subjects.

The early spread of Buddhism – and Asoka's deliberate act of proselytization – took place in a wider political and commercial context (Neelis 2011). In Aśoka's Thirteenth Major Rock Edict, he proclaims that his ethical conquest has extended to southern India and Sri Lanka, as well as to the lands 'where the Greek king Antiochos rules, beyond there where the four kings named Ptolemy, Antigonos, Magas and Alexander rule' (trans. Dhammika 1993). We find here a snapshot of the political status quo in western Asia in the late 260s and early 250s BCE. The kings of whom Aśoka was aware were Antiochos II Theos of Syria, Ptolemy II Philadelphos of Egypt, Antigonos II Gonatas of Macedonia, Magas of Cyrene and Alexander II of Epirus. The Seleucid king Antiochos was his only direct neighbour, but he was aware of the names, at least, of four additional Hellenistic monarchs. The placement of Aśoka's edicts throughout his empire means that these names will have been read by many with no direct experience of Greeks, or the other foreign peoples the king claims to have converted.

The two Greek Aśokan inscriptions at Old Kandahar reproduce texts in circulation in the form of other, Prākrit inscriptions throughout the empire (Rougemont 2012: nos 82–83). The longest Greek inscription is fragmentary, but contains portions of the Twelfth and Thirteenth Major Rock Edicts. The section mentioning the Hellenistic kings is, unfortunately, missing. The translations into Greek render Buddhist vocabulary into terms more familiar to Greeks (e.g. *dharma* into *eusebeia*). In communicating Buddhist ethical values, however, they also communicate something about the wider (Indian) world of which the Greek community at Kandahar was now part. The beginning of the Thirteenth Rock Edict describes Aśoka's bloody conquest of Kalinga, in eastern India. In the briefer of the two Greek Kandahar inscriptions, which is not a direct translation of an Indian original, the king claims that ‘everything is well throughout the whole world’ (*panta euthēnai kata pasan gēn*). The population of third-century Kandahar was therefore exposed to a worldview which encompassed its neighbours in the Hellenistic kingdoms to the west, but also lands and peoples in the southern and eastern reaches of the Indian subcontinent.

Like Buddhist teachings, the movement of textiles may be traced through written sources. The *Periplus*, as I have already noted, provides a practical guide to networks of maritime and overland trade. In the writings of Roman historians and philosophers, it can also be seen that the movement of textiles and other goods from foreign lands to the east was loaded with ethical and ideological significance. Florus (*c.*74–130 CE) mentions, somewhat fancifully, the bringing of gifts by Scythians, Sarmatians, Seres and Indians as part of a successful Roman campaign of subjugation against the whole known world (*Epitomae* 2.34). Pliny (23–79 CE) emphasizes the drain of India, China and Arabia on Roman finances, the labour involved in producing silk and the vast distances travelled by the finished textiles, and contrasts the frivolous and licentious uses to which such imported luxuries are put (*Natural History* 6.54, 12.84). Seneca the Elder (54 BCE–39 CE), too, equates the wearing of figure-revealing foreign silks with moral degeneracy (*Controversiae* 2.7). Martial (40–104 CE) thinks that lavishing gifts of fine silks can buy him a better quality of mistress than his friend’s (*Epigrams* 11.27). (A time, perhaps, to recall Nikaia’s lapis lazuli.) In the view of some Romans, long-distance connections led to the adoption of unsavoury foreign ways of dressing and behaving, which transgressed traditional Roman values. It is not hard to think of modern examples of the same phenomenon.

Tracing the movement of textiles in the archaeological record is more difficult, given their vulnerability to decay. Roman silk fragments are rare (some pieces are noted by Wild 1970: 12–13). Cotton is marginally less scarce, and is a commodity that we can trace in the *Periplus* and on the ground (on later periods, see Ray 2005). At the Roman port of Berenike, on the Red Sea coast of Egypt, fragments of cotton have been found dating to the first century CE and fourth–fifth centuries CE (Wild and Wild 2005). According to analysis of spinning techniques, some of the cotton arrived at Berenike from or via Egypt, and some from India. As well as a commodity to be traded, cotton played a role in facilitating long-distance contact and trade though Indian Ocean networks. Some fragments of Indian cotton of the first century CE belonged to a ship’s sail (Wild and Wild 2001).

Barygaza, modern Broach in Gujarat, was another point in the network that brought cotton to Egypt and the Mediterranean. The *Periplus* (49) describes the transportation of goods such as silk, cotton and ivory from smaller markets around Barygaza, to the port. Local demand for wine, metal and gold and silver coins fuelled this exchange. Silk and cotton were also among the goods exchanged for Roman coin at Muziris, in southern India (possibly Pattanam in Kerala). Southern India has yielded many discoveries of Indian coins (Tomber 2008 on the Roman Indian trade as a whole; Barnes 2005 on Indian Ocean textile trade).

My final ‘taster’ of a commodity that travelled through long-distance networks and was received and reinterpreted by diverse populations along the way is the story of the Trojan War. Plutarch praised Alexander the Great for spreading the works of Homer, as a vehicle for Greek culture, throughout the eastern lands he conquered, and other authors also claim that Homer was known in India (Plutarch, *On the fortune or virtue of Alexander* I 328 D; Dio Chrysostom, *Orations* 53.6–8; Aelian, *Varia Historia* 12.4). Such statements tell us more about Greek and Roman imperialism and notions of cultural superiority than they do about the reading habits of any actual Indians. Yet there is a considerable body of evidence that supports the notion that stories of the Trojan War achieved a wide circulation in the Mediterranean world, Egypt, West Asia and even India.

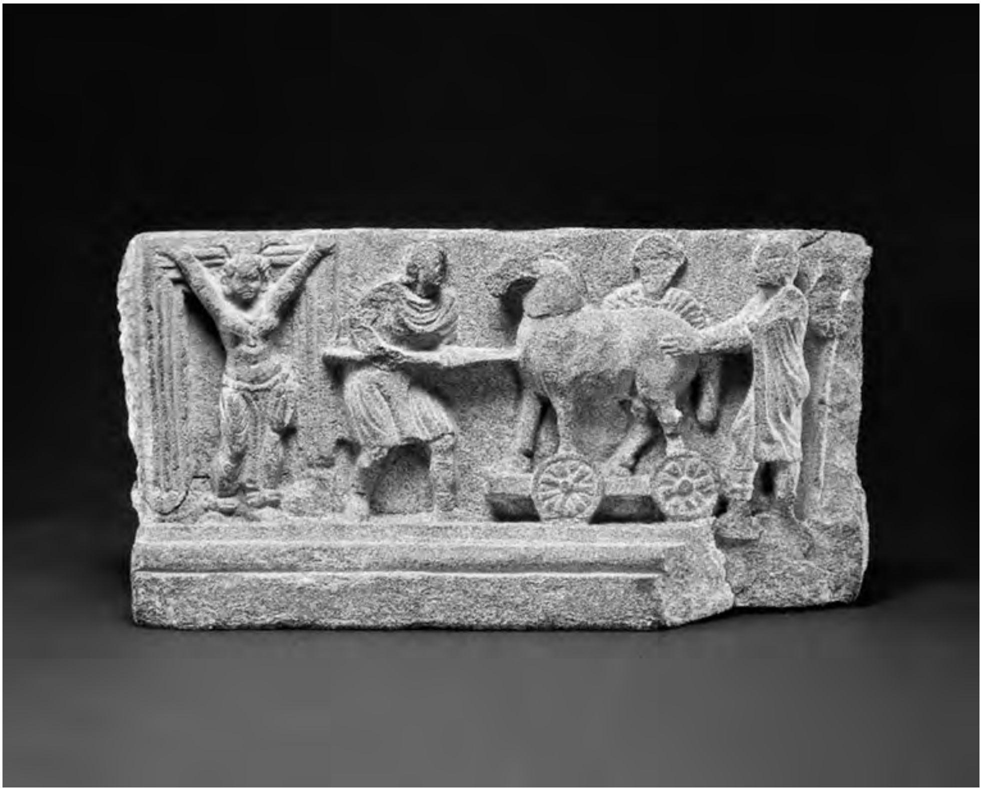

Figure 9.5.2 Relief from Gandhāra depicting the Trojan Horse © The British Museum

The evidence that Homer was read overlaps only in part with evidence that stories of the Trojan War were known. Homer is by far the most common author encountered among Greek literary papyri from Hellenistic Egypt, and in school texts, and within the Homeric corpus the *Iliad* was the most popular work (Cribiore 2001: 195–96). Literacy in Greek was not, however, the only medium through which a person might experience tales of the Trojan War, or through which they might spread. In Gandhāra, the mountainous region north-west of modern Islamabad, in Pakistan, a schist relief depicting the wooden horse full of Greeks being brought into Troy was found at the site of a Buddhist monastery (Allan 1946; Figure 9.5.2). The scene gives an unequivocal presentation of the story of the Trojan horse. Men with spears test the horse and drag it towards city walls where a female figure (Cassandra) stands with her arms raised in warning, blocking the gate. Whether or not anyone was reading Homer in Gandhāra at this period (the second–third century CE) – or even speaking Greek – the tale of the fall of Troy was part of the local visual language. I shall return to the Gandhāran Trojan Horse below.

Begram: hidden treasures

The site of Begram, north of present-day Kabul, lay at the intersection of maritime and overland routes from the Mediterranean, India and China (Mairs 2012; Mehendale 1996). In the first and second centuries CE, it was one of the major metropoleis of the Kushan empire. Our knowledge of long-distance connections at Begram derives principally from material excavated between 1936 and 1940 by the Délégation archéologique Française en Afghanistan (DAFA). These excavations have their own global context. The DAFA was founded in 1922 by the French Ministère des Affaires étrangères. In Third Afghan War in 1919 the Afghan Amir, Amanullah, had fought the British to a stalemate, and asserted Afghanistan's full autonomy. Keen to avoid dependence on the two neighbouring powers, the British and Russian empires, Amanullah sought closer connections with France. The arrival of French archaeologists in the country was part of a much wider programme of Franco-Afghan co-operation (Olivier-Utard 1997; Bernard 2002; Fenet 2010). The excavators of Begram, Joseph and Ria Hackin, joined de Gaulle's Free French resistance movement in London in 1940, and were killed when their ship was torpedoed in 1941 off the north-west coast of Spain.

Between 1989 and 2003, the finds from Begram, along with material from other sites, lay hidden in vaults in Kabul, to escape a new war. After their rediscovery, in 2006, the 'trésors retrouvés' were sent to be exhibited at the Musée national des arts asiatiques-Guimet in Paris, permanent home of other items excavated by the DAFA mission in Afghanistan (Cambon and Jarrige 2006). On the exhibition's website, schoolchildren could complete a quiz which taught them, among other things, that 'Afghanistan is situated in the heart of Central Asia', 'the Silk Route is a network of commercial routes between Asia and Europe' and 'global heritage belongs to all the people of the world, wherever they live' (www.guimet.fr/sites/tresorsafghans/index.html). The context in which the material from Begram was excavated, cached and exhibited was certainly a global one. The presentation of this material also made points about the global nature of the ancient world from which it came.

Begram was connected to the Indian Ocean along the Indus and Kabul rivers. When the *Periplus* (47) refers to goods from the territory inland from Barygaza, this includes Begram and its hinterland. The luxury goods excavated within the palace complex at Begram date to the first to second centuries CE. The 'treasure' was deposited in two rooms with thick walls and blocked-up doors: it is uncertain whether it should be regarded as a royal treasury or commercial depot. It included goods from three main geographical areas: the Roman eastern Mediterranean (glassware, plaster casts, bronzes, stoneware); India (ivories); and China (lacquerware). These objects were at the luxury end of the long-distance market in commodities. Their points of origin are unmistakeable. Some of the glassware bears coloured decorations, of scenes such as the date harvest in Egypt or the lighthouse of Alexandria, or is in fancy shapes, such as fish (Whitehouse 2001). We may trace glassware of this sort back to the Roman Mediterranean through the ports of India, Arabia and Egypt, in the archaeological record and in the account of the *Periplus* (Meyer 1992; Stern 1991; Whitehouse 1998). The plaster casts and bronzes, which reproduce mythological scenes, provide a portable source of Greek and Roman artistic imagery, which may have inspired local craftspeople. They are one of the means by which the motif of the Trojan horse, discussed in the previous section, may have been transmitted to the region. We do them a disservice, however, by considering them solely as *objets d'art*. The plaster casts were designed to be used in the manufacture of new metal ware vessels, permitting the exact reproduction of identical images across vast distances (Mairs 2014). The Indian ivories depicted scenes of nude female figures, animals and plants with a typically Indian artistic flavour (Mehendale 2001; Simpson 2011). Ivory was one of the commodities mentioned in the *Periplus*, and Begram was just one node in a network that included markets for ivory as far afield as Pompeii (During Caspers 1981). The Chinese laquerware represents another distant region which Begram itself, as a node, connected to West Asian and Indian Ocean networks (Zhang 2011).

Without further archaeological context, the Begram hoard cannot be used to assess the impact of connectivity on local culture at a level below that of the elite. At Begram, as in the Hellenistic and Roman worlds, many commodities from far away fell into the category of luxury goods. This is the case with Indian cottons and silks in Rome, where they were used to send signals about wealth and refinement, but were also brought into debates about morality in Roman society. How might Begram feed into similar narratives of elite 'glocalization'?

I reiterate my point about these items as sources of imagery and models for reproduction. The Gandhāran Trojan Horse was part of a much more widespread visual language in Gandhāra and neighbouring regions (such as Begram) in the early centuries CE, which drew upon Graeco-Roman styles and motifs, reinventing and developing them to create a dynamic local Buddhist artistic register (on Gandhāran art, see Brancaccio and Behrendt 2006). This art does not have to have been produced by artisans who had any clear knowledge of its ultimate source. Greek and Roman goods and styles had been in circulation in the region since at least the late fourth century BCE, from the Hellenistic kingdom of Bactria, and later through the Indian Ocean trade from Egypt. The images on the Begram plaster casts, glassware and bronzes were, by the period they were deposited in the palace cache, already familiar as part of a local cultural *koine* (a term to which I return below).

At Begram, the global became the local: the long-term interaction of peoples, cultures and artistic styles in the region between Iran and India in the Hellenistic and Roman periods produced its own idiosyncratic local forms and practices. I have argued elsewhere for a more limited zone where a common cultural 'language' was creolized from diverse influences, in Hellenistic Bactria (Mairs 2013: 280–83). The forces at work in the movement and reception of religions, commodities, artistic forms and even stories in western Eurasia, in the period contemporary with the Hellenistic and Roman empires, are not dissimilar from those at work in a small kingdom such as Bactria, which existed for less than 200 years. To the vendor or purchaser of the luxury goods from the Begram cache, the middleman who brought them from a Roman ship at an Indian port to a city in the Hindu Kush, or the craftsman who worked for a wealthy local patron reproducing imagery from a land he had never visited, or perhaps heard of, global influences were received, commoditized and put to work in local systems of cultural and economic value.

Global languages

Poseidippos wrote about Nikaia's gift in Greek. The poet was an immigrant to Egypt, from Pella, in Macedonia. Some of his poems show that he was sensitive to the nuances of Greek dialect, and the images which dialectal code-switching might conjure up for his readership (Fantuzzi and Hunter 2004: 375–76; Sens 2004). By the time of Cleopatra VII (69–30 BCE), knowledge of Macedonian had become so uncommon that Plutarch describes the last Ptolemaic queen's facility in the dialect alongside her talents in speaking languages such as Parthian, Ethiopian and Troglodyte (*Antony* 27.4). The interconnected Hellenistic world, with its constant movements of people, goods and ideas, required a new, global language. This language was Koine – 'Common' – Greek, a term which I have already appropriated to refer to a common 'language' of cultural features, derived from many sources. Koine Greek is the language of the documentary papyri of Hellenistic and Roman Egypt (Evans and Obbink 2010), and the language in which the foundational texts of a new, global religion – the books of the Greek New Testament – were composed in the period of the early Roman Empire. It was the ancient world's language of cultural and religious diffusion *par excellence*, and a powerful weapon in the arsenal of Greek and Roman (cultural) imperialism.

By the time of Poseidippos, a process of dialect-levelling was underway in the hellenophone eastern Mediterranean (Colvin 2009). Koine, as the name suggests, was a linguistic form born from interaction between the diverse immigrant populations of the Hellenistic world. It served as a common vehicle of exchange between people whose own native dialects and languages might have been so distinct as to impede effective communication. It facilitated the exchange of goods and ideas.

Koine Greek has much in common with the global languages, in particular the global Englishes, of the modern globalized world (globalization and language: Fairclough 2006; Coupland 2010; Blommaert 2010; global Englishes: Crystal 1997, Kachru *et al.* 2006). Like global Englishes, the Koine and its speakers have often been misunderstood. To scholars of the nineteenth and twentieth centuries, the papyri of Egypt were full of 'bad Greek', and this linguistic deficiency was often understood as the result of imperfect, non-native command of the language. One should not, however, assume that writers and speakers of Greek in the eastern Mediterranean were aspiring to Classical Attic prose, of the kind generations of Euro-American scholars were taught to regard as the only acceptable standard. Similarly, British and American views of global varieties of English tend to focus on perceived deficiencies, against a standardized, westernized model. An example is the widespread online mockery of 'Hinglish' or 'Chinglish'.

The 'bad Greek' model of papyrological Greek has given way to a perspective more appreciative of the power and flexibility of the Koine, and the insights which even 'bad' grammar and spelling give into the way in which Greek was actually spoken in places such as Egypt (Evans 2010; Clarysse 1993; Evans 2012; Mairs and Martin 2008/2009). The Koine was a language in its own right, with its own rules, not simply a deficient form of some 'standard' language. It became a standard of its own, and one with a far greater number of speakers and more extensive geographical spread than that ever enjoyed by any of the earlier Greek dialects.

Global English has, in the same way, become its own linguistic standard, for all of its innovations from its parent language(s) (Phillipson 2008). A 2013 report by the European Commission gives guidelines to staff on how to use institutional language that has 'developed a vocabulary that differs from that of any recognized form of English' (European Court of Auditors: Secretariat General Translation Directorate 2013: 4).

If we approach Koine Greek in a similar vein, we may generate some new ideas for looking at globalization and material culture in the ancient world. Global languages may emerge from a small number of metropolitan centres that once generated and facilitated long-distance communication. Through population movements, education and patterns of exchange, they become adopted as auxiliary languages, and eventually even primary languages, by large numbers of people in regions beyond their original homeland. These new forms develop their own sets of rules. They become languages of communication, not just with the old, colonial metropolitan centre, but with other regions with their own, distinct languages. Similarly, the Aegean world, the ultimate source of the Koine, and elements of the culture and social organization of the Hellenistic communities, can often seem 'left out of the party' in the wider hellenophone worlds of the east. In inscriptions such as the Kandahar edicts of Aśoka, Greek speakers – not necessarily native speakers – communicate with one another in areas with tenuous connections to Greece, or none at all. In Koine Greek, as in global English, the original speech community no longer defines the 'standard'.

Nikaia's gift

From the foundation of the Hellenistic kingdoms the late fourth century BCE, the inhabitants of the lands from Macedonia to Bactria, from Egypt to Gujarat, lived in a world transformed by colonization, immigration and commercial expansion. Descriptions of our modern, globalized world, taken out of context, could often be applied equally well to the ancient world. Both are worlds which are:

> fundamentally characterized by objects in motion. These objects include ideas and ideologies, people and goods, images and message, technologies and techniques. This is a world of flows. It is also, of course, a world of structures, organizations, and other stable social forms.
> *(Appadurai 2000: 5)*

These 'objects in motion' include ideas such as Buddhism, goods such as silk, images such as the Trojan Horse, and techniques such as reproducing images from moulds. I have also explored how these were received within the 'stable social forms' of empires, cities and communities. There were some cases in which the political context, for example territorial configuration through war or diplomacy, provided only a catalyst for the development of new connections. The Koine, for example, came about because the conquests of Alexander the Great scattered Greek settlers from Egypt to Bactria. It evolved thereafter on its own terms. Although poets such as Poseidippos wrote elegant verse at royal courts, the Greek spoken in the streets of Kandahar was not policed by the Library of Alexandria.

As they moved through networks, things and ideas received new meanings in new cultural contexts. Pliny saw Indian fabrics as a symbol of Roman moral corruption. In India, Roman coins were valued as bullion. Buddhist ideas were translated into Greek. Gandhāran monasteries were decorated with Buddhist (and some Greek) tales, rendered in adapted Graeco-Roman artistic styles.

To what extent did Nikaia, with her shiny new piece of lapis lazuli jewellery, understand herself as living in a globalized world? To what extent did the well-travelled poet, or the girl's lover – who may have been annoyed at how much the fancy imported lapis cost, hoping the kiss would be worth it? The engraver who worked the gem may have known something of the journey of lapis from Bactria to Egypt, or at least have been able to trace his supply chain a certain distance. It is possible, through the archaeological, epigraphic and literary record, to trace the movement and meeting of people, ideas and things in the ancient world. It is equally important to question the extent to which contemporary agents saw themselves as participating in connected systems. At the most fundamental level (something is rare and expensive because it comes from far away), Nikaia certainly did. She was also an immigrant from the island of Kos, to a new multicultural metropolis on the coast of Egypt, where new linguistic and cultural koines were in the process of evolving – a city where, as a much later immigrant, Lawrence Durrell, would describe it, 'the races . . . seethe . . . like must in a vat' (*Clea* 63). The question might be phrased a different way: would an inhabitant of any of the Hellenistic kingdoms or Roman provinces have recognized their own community *without* immigrants or imported goods (or gods)? The answer is almost certainly not. Global mobility had local repercussions, in the 'Greek gifts' of exotic stones, or the Trojan Horse.

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9.6

The global Ottomans

Joanita Vroom

Introduction: globalization or proto-globalization: that is the question

The problem whether a 'globalization' perspective on the Ottoman Empire is fruitful for archaeology opens a Pandora's box jam-packed with questions. Some of them are quite challenging, such as: are we sure to which archaeological problems 'globalization' theory provides a solution? Does 'globalization' add any further explanatory framework to the concepts of 'regional and interregional distribution', 'long-distance trade', 'networks' and other concepts of space and time in archaeology, which are both well-known and hard enough to define? Does 'globalization' provide any explanatory power in itself, or is it a means that helps to restate archaeological problems and explanations in a new perspective?

As a scholarly concept 'globalization' rose to prominence during the 1990s in sociology and world history, and now once more has to find its way towards sustainability in archaeology through a host of true believers on one side and sceptics on the other (Osterhammel 2011). Even sidestepping the madding crowd, there remain enough problems for archaeologists to consider. For starters: if globalization can be traced back in time, including the Ottoman Empire, has the concept a clear enough meaning to distinguish it from non-globalizing periods, and how can we determine this empirically with archaeological data?

When globalization is 'a form of connectivity', as Robert Robertson puts it in his introductory article of this book, then the Ottoman Empire is indeed a 'global empire', as it fits perfectly in the category of a long-lasting, state-controlled 'connectivity' across a widespread geographical area (Robertson this volume). After the creation of this Islamic-Turkish realm in 1300, the Empire reached its largest territorial extent – spanning south-eastern Europe, northern Africa, and the Middle East – during the reign of Suleyman I 'the Magnificent' (r.1520–1566), thus integrating large parts of the then known world and interacting with most of the rest. The Ottomans controlled the most important Islamic centres (Mecca, Medina and Jerusalem), and made economically and politically overland connections with the Safavids and other dynasties in Central Asia and India until the early twentieth century (Figure 9.6.1).

However, if we understand 'globalization' as the typically 'modern' process of worldwide socio-economic, cultural and digital integration based on capitalistic, (post-)industrial and technological exchanges and interdependence, which only started in the late nineteenth century,

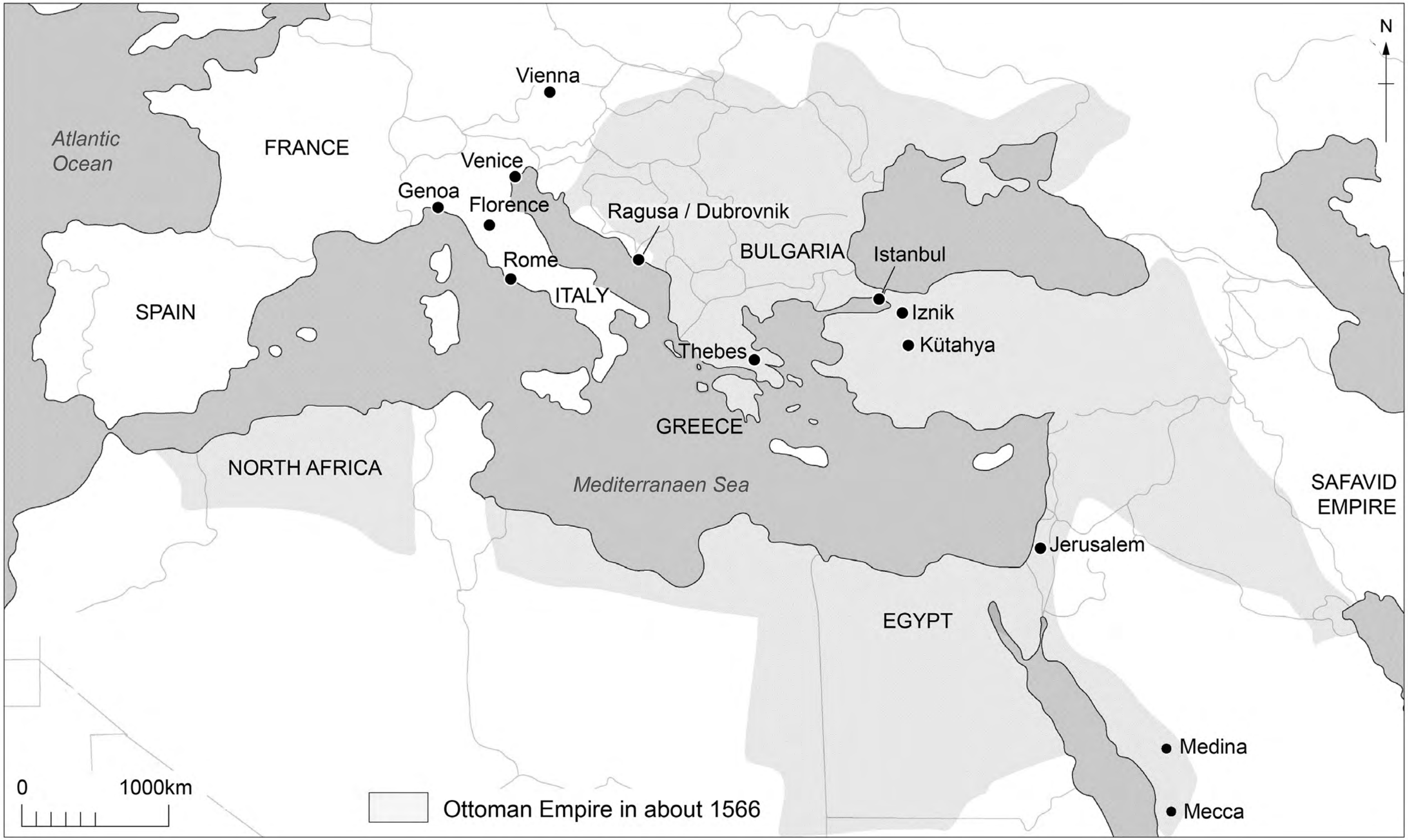

Figure 9.6.1 Map of the Ottoman Empire during the reign of Sultan Suleyman I 'the Magnificent' (r.1520–1566 CE) (drawing: J. Porck)

the Ottoman Empire was definitely something else. Large and complex though it was, it cannot be compared with the current constantly interacting 'pan-planetary' network that is systematically connected through new technologies (Feinman this volume). Seen in the perspective of 'global history', certain commodities and ideas undoubtedly moved around the Ottoman Empire faster and were more accessible than before in the region, but seen in the perspective of 'the history of globalization', the Ottomans certainly knew no form of the hyper-integration that is characteristic of twenty-first-century 'modern globalization' of the digital age.

On the other hand, if we define globalization merely as 'complex connectivity, a condition created by a dense network of intense interactions and interdependencies between disparate people brought together through the long distance flow of goods, ideas, and individuals', as Jennings does in this volume, it seems more appropriate to apply to the Ottoman Empire. This definition is, however, quite general, perhaps so general – with question marks hovering over the exact meaning of 'dense', 'intense', 'interdependent', and 'disparate' – that it may apply to almost any other empire – ancient and modern – reducing its problem solving capabilities.

Still, it is true that as the Ottoman Empire encompassed many peoples, many languages and various religions in a huge integrated territory that is nowadays divided over many modern states. During its heyday between the sixteenth and eighteenth century the Empire knew all sorts of forms of relative complex connectivity, as well as long distance flows of goods, tastes in consumption, ideas and individuals. Especially for this period between 1600 and 1800 in world history – a time of expansionism and imperialism, of increasing trade and communication links, of the rise of widely traded new commodities and also of the widespread exchange of plants, animals, crops, populations and diseases – the British historians Antony G. Hopkins and Christopher A. Bayly have introduced the term 'proto-globalization' or 'early modern globalization', as opposed to 'archaic globalization' and 'modern globalization' (Hopkins 2003: 3; Bayly 2004).

Although this historical perspective on globalization is cautious (it allows for overlapping of the three stadia), the problem of demarcation between the three stages remains contested (Osterhammel 2011). Still, as working hypothesis, the term 'proto-globalization' seems to fit the bundle of processes and developing connectivity in the Ottoman Empire as a proto-modern historical phenomenon in its own right more comfortably than a general label 'globalization', if only to avoid anachronisms, meaningless broad definitions and unwanted connotations with modern digital hyper-integration. Proto-globalization can be taken to stand for complex connectivity in the context of integrated empires, but embedded in and relative to the period and part of the world under discussion here (Bennison 2003).

When empirically exploring the question of whether a (proto-)globalization perspective on the Ottoman Empire is fruitful for archaeology, the problem arises that 'Ottoman archaeology' is a relatively new branch of archaeology. So new, in fact, that we first need to ascertain whether it is able to provide the data, preferably 'big data', to sustain a 'global' approach of Ottoman material culture. After doing so, I discuss as case study the 'global' success of Iznik Ware and Kütahya Ware during the sixteenth to eighteenth centuries throughout the Empire and beyond.

The development of a 'global' Ottoman archaeology

'Ottoman archaeology', or perhaps more aptly 'archaeology within the boundaries of the Ottoman Empire', more or less started in the second half of the eighteenth century with the appearance in Ottoman controlled areas of Western travellers and antiquarians. Until then, the growing interests among the new European elites for their roots and heritage had been mostly restricted to the major prehistoric sites in western Europe and the classical remains in Italy, but after about 1750 it became easier to travel to Ottoman lands and the eastern

Mediterranean became a new destination for Westerners. Two major impulses in this process were the Napoleonic conquest of Egypt in 1798 and the Greek struggle for independence, both resulting in increased interest in these lands and increasing numbers of Western traveller-antiquarians arriving in the East during the late eighteenth and early nineteenth centuries (Baram 2009: 648; Bahrani, Çelik and Eldem 2011; Hamilakis 2011).

A more academic approach to 'Ottoman archaeology' developed in the course of the late nineteenth and early twentieth centuries, in the wake of large-scale archaeological excavations in the eastern Mediterranean. Initially, though, most archaeologists working on these projects often ignored, avoided or even purposely destroyed the upper Late Islamic and Ottoman levels, fixated as they were on the 'Classical' or 'Biblical' remains. This practice was only openly questioned from the 1980s onwards (Glock 1985; Silberman 1989: 228–42). It was, in any case, fairly recently that archaeological research focusing on the Ottoman period fully emerged in West Asia, the Balkans and the eastern Mediterranean (e.g. Hayes 1992; Milwright 2000; Baram 2002; 2009; Gerelyes and Kovács 2003; Vroom 2003; Guionova 2005; Yenişehiroğlu 2005).

Probably the first book exploring the archaeology of the Ottoman Empire as a separate discipline appeared in 2000 under the title *A Historical archaeology of the Ottoman Empire* (Baram and Caroll 2000). The volume was the result of a symposium held in 1996 at Binghamton University, New York, and dealt with topics ranging from the excavation of an eighteenth-century shipwreck in the northern Red Sea to the use of dendrochronology in order to date standing Ottoman structures (Kuniholm 2000; Ward 2000, with more examples of underwater archaeology on Ottoman shipwrecks).

Another landmark volume was *Between Venice and Istanbul*, published in 2007 but originating from a workshop in Cincinnati in 2003. This influential book stressed an interdisciplinary approach and dialogue between field archaeologists and historians working in Greece on the Post-Classical periods (Davies and Davis 2007). Other important publications on Ottoman archaeology treated this field of research, not seldom described as 'Post-Medieval Islamic archaeology', mostly within general surveys of 'Islamic archaeology' or 'Islamic Art' (e.g. Rosen-Ayalon 2006; Milwright 2010: 174–91).

Until recently, Ottoman archaeology has been focused mostly on the material way in which Ottoman authority in the empire became visible in the urban infrastructure of major settlements: through the construction of mosques, minarets, markets (*pazar*), public bathhouses (*hamam*) and water fountains (e.g. Rosen-Ayalon 1985; Cichocki 2005; Ergin 2011). In addition, standing buildings and their architectural decoration (mostly tiles) were documented (e.g. Kana'an and McQuitty 1994; Schriwer 2002; Caroll *et al.* 2006). During the last decades, the focus has shifted somewhat to excavations of average towns and villages throughout the Ottoman Empire, such as the abandoned Medieval-Ottoman town of Stari Bar in Montenegro, focusing in their studies on house structures as well as on ceramic, glass and metal finds (e.g. Gelichi and Guštin 2005; Gelichi 2006, 2008).

Research on monumental Ottoman architecture in Greece, in the Balkans and in Turkey has been initiated and developed since the 1970s largely by the Dutch Ottomanist Machiel Kiel, who also studied settlement patterns and demographic trends in these regions based on his reading of the *defters*, or Ottoman tax registers (for Kiel's full bibliography, see Hartmuth and Dilsiz 2010, 193–207). Study of the material remains retrieved from Ottoman garbage pits and cesspits in regional centres such as Thebes in Greece and Durrës in Albania yielded much information of the more common wares as examples of Ottoman material culture (Vroom 2006).

The territorial expansion of the Ottoman Empire had its material component in the building of harbours, fortifications and military structures, such as fortresses and castles, palisades and guard stations (e.g. Thys-Şenoçak 1991; Gerelyes and Kovács 2003; Carvajal and Palanco 2013).

Even military events left archaeological traces, such as remains of trenches and weaponry from Napoleon's army left at Tel Dor after his defeat at 'Akko (Acre) in 1799 (Wachsman and Raveh 1984). Also, research on the introduction of nineteenth- and early twentieth-century innovations (e.g. clock towers, railways and railroad stations) has shed light on the transnational Late Ottoman identity (e.g. Burke 2010).

In several parts of the former Ottoman Empire ethnographic and sociological studies have been focused on villages during the 'Ottoman era', using written sources and even oral history (e.g. Bommeljé and Doorn 1987; Ziadeh 1995; Ziadeh-Seely 2000). Likewise, traditional domestic and agricultural architectural forms have been explored in central Greece and Jordan (Stedman 1996; Carroll *et al.* 2006), while practices of land exploitation and agricultural estates *(çiftliks)* have been researched in the eastern Peloponnese (Gregory 2007). Moreover, grain mills and olive presses of the Ottoman period in eastern Crete and in Stari Bar have been a subject of study, as well as the use of water mills in the Near East (McQuitty 1995; Brumfield 2000; Zanichelli 2008). Also, Ottoman food systems and diets have received attention (Nesbitt 1993; LaBianca 2000; Pluskowski and Seetah 2006).

Various regional archaeological surveys in Greece, Cyprus and Jordan have specifically included the study of land use and settlement patterns of the Ottoman past in their approach (e.g. Bommeljé and Doorn 1987; Doorn 1989; Davis 1991, 1989; Vroom 2003; Given *et al.* 2014). For instance, the network of Ottoman inns (*khans*), land routes and bridges was mapped in the Greek Pindos Mountains (Bommeljé and Doorn 1996). Moreover, methodological discussions have contributed to the understanding of the relation between archaeological data, archival documents, and cartographical as well as topographical information on a Greek region in Ottoman times (Zarinebaf *et al.* 2005).

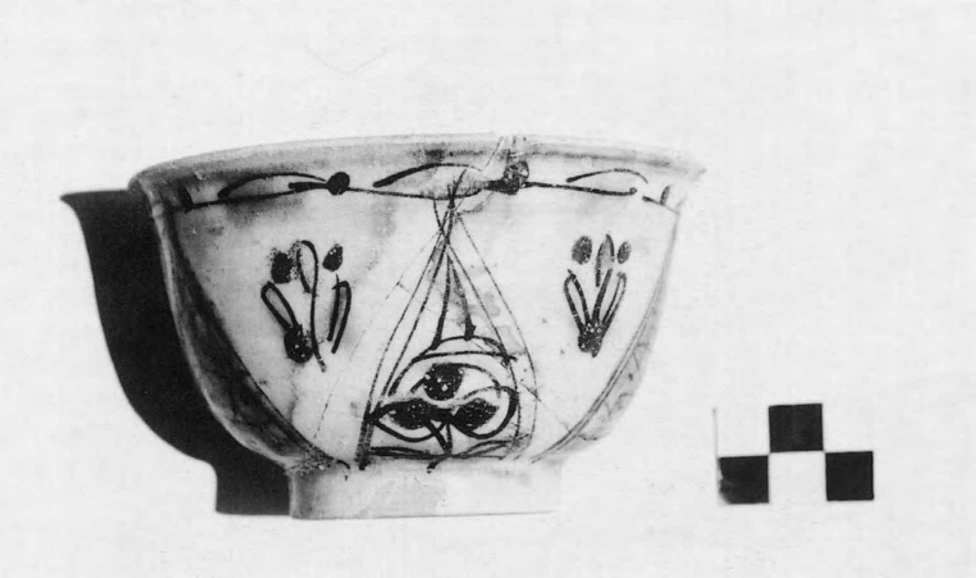

Figure 9.6.2a Kütahya Ware coffee cup from Thebes, Greece (J. Vroom)

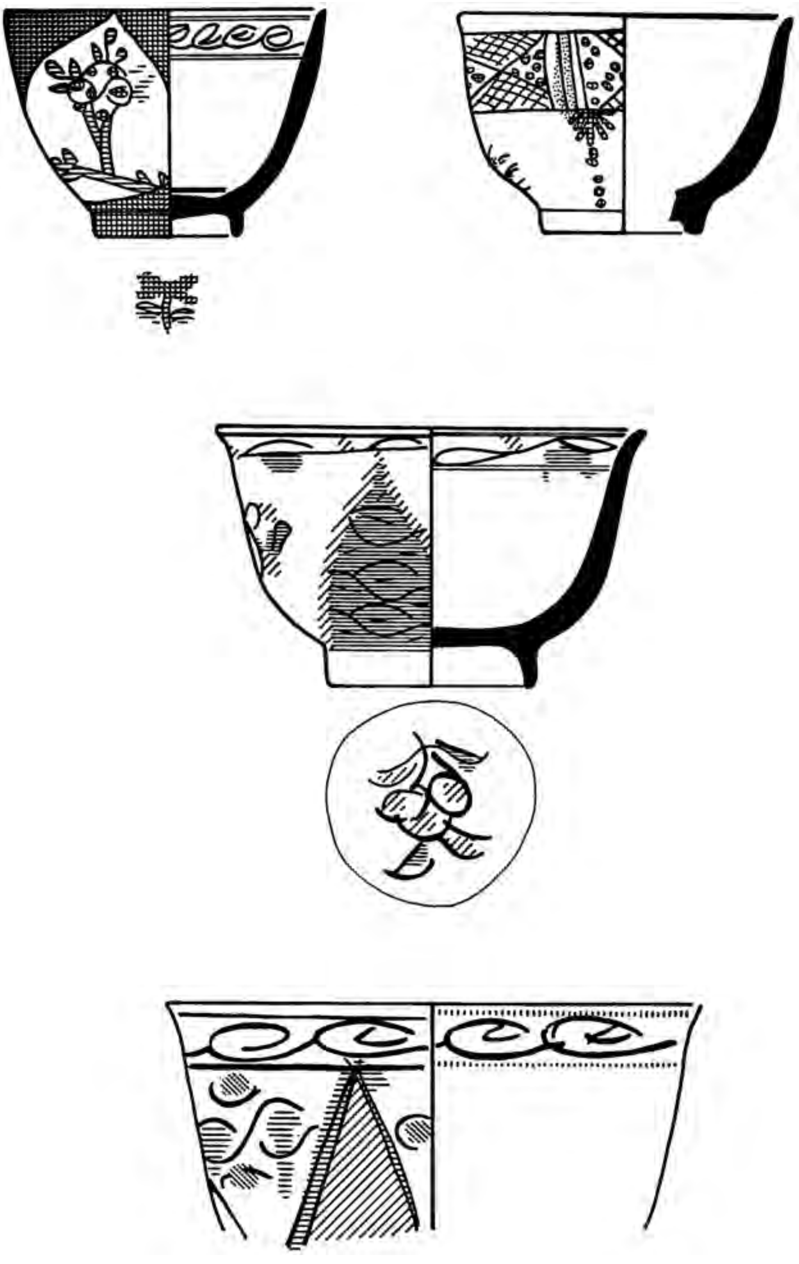

Figure 9.6.2b Drawing of Kütahya Ware coffee cups from Thebes, Greece (J. Vroom)

Finally, recent archaeological research has shed light on the diffusion of new customs (such as the introduction of smoking around 1600) over the Ottoman Empire. In fact, among the most studied objects in Ottoman archaeology have are the ceramic tobacco bowls of the *chibouk* pipe, the chronology of which has facilitated the dating of rural sites and excavated layers throughout the Ottoman territories (Robinson 1983; 1985; Simpson 1990; Hayes 1992; Baram 1999;

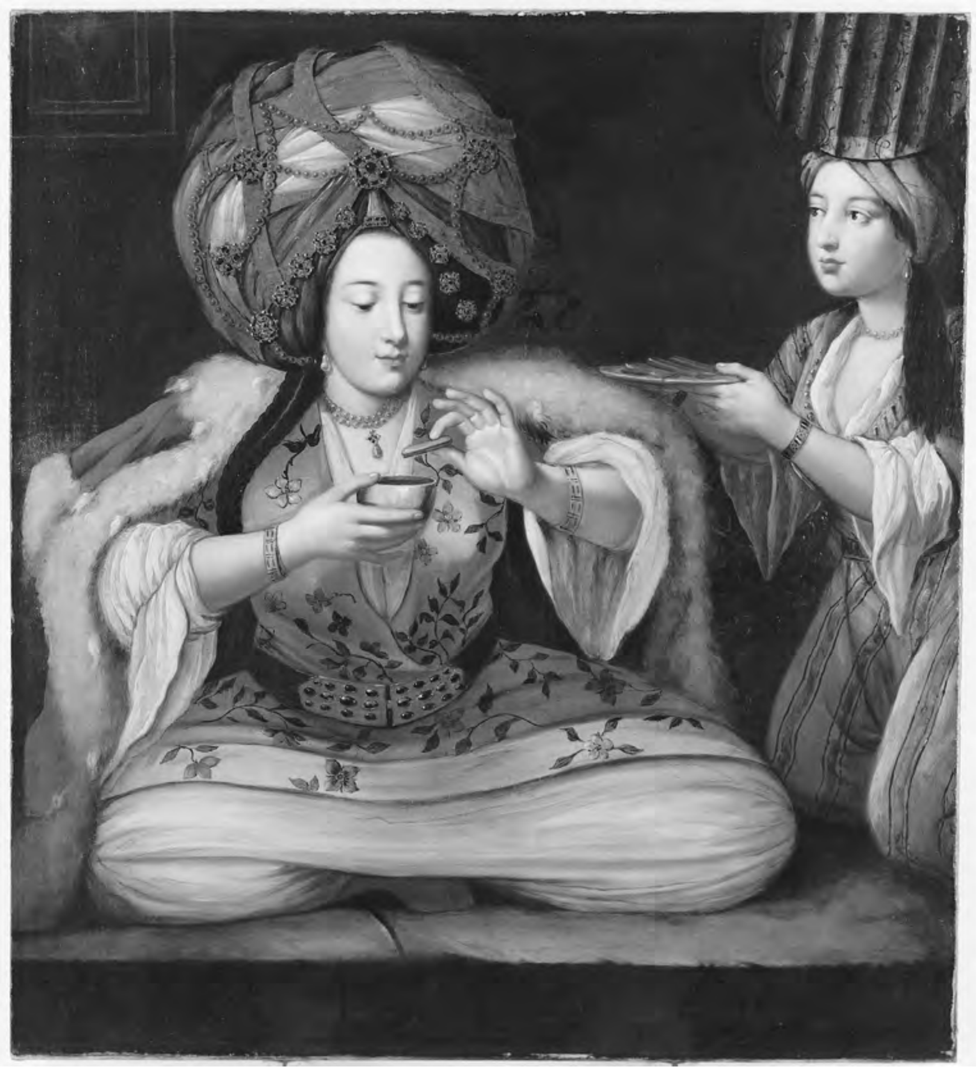

Figure 9.6.3 Oil painting by unknown painter (French School), *Enjoying Coffee* (112 x 101.5 cm), Suna and Iran Kıraç Foundation, Orientalist Collection, Pera Museum, first half of the eighteenth century (after Redna and Rifat 2006: 107). I would like to thank Dr. R. Barış Kıbrıs, Curator of the Orientalist Paintings Collection, Suna and İnan Kıraç Foundation, Pera Museum (Istanbul) for permission to reproduce this image here

Gelichi and Sabbionesi 2014). In addition, the introduction and spread of small glazed coffee cups (*finçan* – originating from Kütahya in western Turkey, but also from south-east China and from European factories, especially in Meissen, Vienna and southern France), and consequently of coffee drinking in the Empire, have received much attention (Figures 9.6.2a–b and 9.6.3; see Vroom 1996, 2007, 2011; François 2008; cf. in general Baram 1999, 2009: 652).

In recent decades the collecting of Ottoman archaeological data and artefacts in excavations as well as in surface surveys in the eastern Mediterranean and beyond has become standard practice, if not the 'hot new thing' in archaeology (e.g. Hayes 1992; Vroom 1998a, 2003, 2005: 138–99, 2013; Baram 1999, 2002; François 2001–2002; Wartburg 2001; Bikić 2003; Walker 2009). Lately, Ottoman archaeology has fully connected to mainstream discussions in archaeology, debating whether it perhaps should focus more on group 'identity', on 'the materiality of cosmopolitanism' in the Empire, and on the impact of 'post-colonial modernities' (Baram 2009: 659–60). Another recent archaeological (or rather anthropological) perspective can be found in efforts to distinguish a common 'transnational heritage' in the Ottoman past, and thus to challenge present divisions in the modern Middle East (Baram 2009: 647 and 650).

In short, Ottoman archaeology has developed in a relatively short period of time and is currently, perhaps in contrast to several decades ago, capable of providing the data and the perspective to empirically study questions of complex connectivity and the transfer of goods and cultural behaviour throughout the entire Empire, its social system, and beyond.

Ottoman archaeology, Wallerstein's 'world-system' and globalization theory

The Ottoman Empire experienced during the sixteenth to eighteenth centuries a period of almost uninterrupted economic growth. It witnessed the introduction of a plantation economy with new crops (tobacco, coffee, cotton and maize), advances in technology (such as the use of gunpowder and new weaponry), and an enormous expansion in territory and transportation network. This Islamic–Turkish socio-economic and political system now encompassed many peoples, many languages and many religions under the control of (often local) bureaucrats tied vertically to the Sultan in the capital (Burbank and Cooper 2010: 128–48 and map 5.3).

In other words, the Ottoman realm can be considered as a cosmopolitan, multi-religious, multi-cultural empire, and its territory remained stable until the late eighteenth century. It was a system with durable structures and communities, which were typified by an all-embracing network of interactions, and as such it had many of the characteristics of a 'world-system' – to use the famous pre-globalization concept of Immanuel Wallerstein – without being one (Wallerstein 1974; though one may note that it can be seen as part of the Islamic 'world-system', Bennison 2003). Wallerstein underlined that the Empire found itself in Early Post-medieval times economically outside the capitalist world-economy (Wallerstein 1979; Wallerstein *et al.* 1987). For him the Ottoman Empire of the sixteenth century was a classic case of a 'world-empire', with its long-distance trade mainly limited to luxury goods (or non-essentials), such as silk cloths and spices. Thereafter, the Ottomans came into contact with the capitalist world-economy of Europe, and they were inevitably incorporated into the world-economy.

Wallerstein's linkage of Ottoman history with his theory on world-systems as an explanatory model has been criticized by historians, anthropologists and Ottomanists alike as 'one-sided' and Euro-centric (e.g. Islamoğlu and Keyder 1977; Wolf 1982). On the other hand, it has also been acknowledged that Wallerstein's global perspective did draw Ottoman history into a broader historical discussion, from which it benefited greatly (Faroqhi 1999: 18; Baram and Carroll 2000: 14). Without doubt, after Wallerstein more emphasis was put on the Ottoman Empire as part of the world economy, as it expanded through trade and developed an ever-increasing regional specialization, for instance in agricultural production, in cotton-cloth manufacture and in silk industry (see Islamoğlu-Inan 1987 with literature).

Also for archaeologists, the Wallerstein discussion proved a first step to understanding the widening, intensifying, speeding up, and growing impact of economic interconnectedness in the Ottoman Empire in a 'global' perspective. It helped, for instance, to focus on the question of what kinds of commodities were available at specific points in time, and on the question of what market forces may have led the inhabitants of Ottoman cities and rural settlements to buy these products. Thus, it showed the way to map archaeological patterns of Empire-wide relations across all key domains of human activity, from the military to the cultural. In this way Wallerstein's theory has laid the foundation for an empirical discussion of the material culture of the Ottoman Empire in the perspective of globalization theory.

However, the archaeologist has to find a balance between the allure of the sweeping theory and the mundane realities of material finds. To use the words of Ian Morris on world-system theory and Mediterranean archaeology:

> To concentrate on one particular locality in the ancient Mediterranean without reference to its broader context is a meaningless exercise; but equally, to focus on some abstract concept of a world-system without examining how its members actually went about constructing it through adapting or resisting large-scale forces explains little.
>
> *(Morris 1999: 70)*

This holds true also for globalization and Ottoman archaeology.

Still, Ottoman archaeology is now developed enough to provide the data for a wider perspective on the organization of production and expanding long-distance trade patterns in the Empire and beyond. As a case study I will use two types of Ottoman glazed tableware to illustrate the economic and social changes in the Ottoman Empire after *c.*1500, and to explore the rise of complex connectivity related to these changes. These types are Iznik Ware and Kütahya Ware, both from western Turkey. I will discuss their production, their value and their short- and long-distance exchange patterns, and try to link their peculiar history and Empire-wide distribution to the increasing connectivity in the Ottoman system (Knappett, this volume).

Connecting the Empire: the story of Iznik and Kütahya Ware

From the sixteenth century until the end of the eighteenth century, Iznik and Kütahya Ware quite suddenly became the two most traded types of glazed ceramics within and outside the Ottoman Empire (Figures 9.6.2a–b and 9.6.4). Both wares were the result of improved technology and both were apparently specifically designed for the tables of the upper and middle classes. Their glossy white surfaces, painted with metallic oxides, not only provided a colourful decoration for these tables, but also proved easily adaptable to meet new design-trends in the most fashionable Renaissance and Islamic styles of the time (Vroom 2005: 158–61, 168–71).

The main production centres of both types of ware in western Turkey (at Nicaea/Iznik and at Kütahya, near Istanbul) are treated here as one group, because the first products of Kütahya cannot easily be distinguished from those of Iznik until the beginning of the eighteenth century (Lane 1957: 19; Atasoy and Raby 1989: 74; Carswell 1998: 115). Although tin-glazed pottery was a relatively expensive product (tin had to be imported from abroad), these wares were always made primarily for daily use. The vessels and tiles from Iznik and Kütahya were, for instance, commissioned by the Ottoman court in Istanbul for use in the kitchens of the Imperial household, as well as for monumental architectural decoration.

The Ottoman government tightly controlled the production of both Iznik and Kütahya Ware: it allocated the raw materials, it decided on the quantity and quality of the goods produced, and it regulated the pottery prices (Vroom 2003: 296–97 with further literature). Furthermore, these wares fell under strict controls of the government over internal and external trade, so that all mercantile activity was fully state controlled (Islamoğlu and Keyder 1977: 40–41). This control

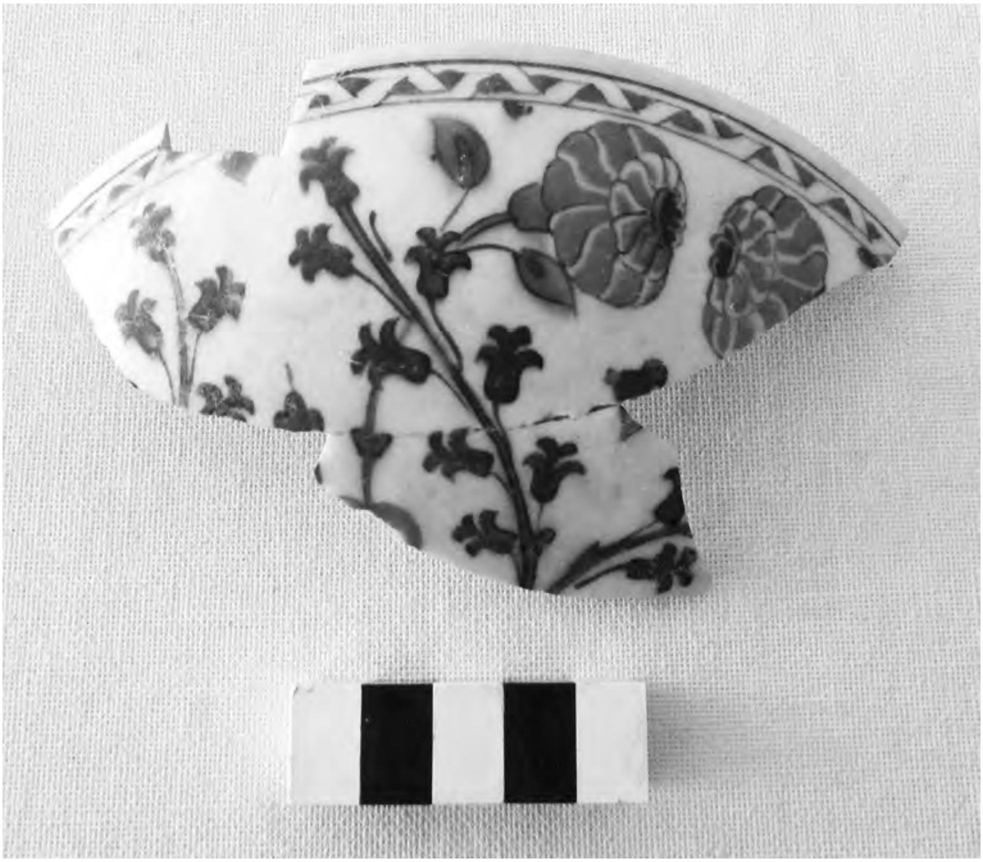

Figure 9.6.4 Iznik Ware fragment from Mytilini, Greece (J. Vroom)

was effected through the granting to merchants of concessions, the sale of which provided the state with revenues. In addition, the flow of commodities (including pottery) in the Empire was regulated through restrictions, prohibitions and sanctions (Vroom 2003: 298 with literature).

In the sixteenth century the leading position in pottery production was held by Iznik, but during the seventeenth and eighteenth centuries, the potter's centre at Kütahya started to take over. Although production had started there around the same time as in Iznik, the potter's workshops at Kütahya originally played a secondary role, providing Iznik with additional capacity when necessary. However, precisely the fact that the Kütahya potteries were not very dependent on court patronage enabled them to remain economically viable, and already by 1608 there is proof of increasing rivalry between the potters of Iznik and Kütahya (Akalin 1997: 13).

Ottoman ceramics go 'global'

In spite of state-controlled production and trade inside the Ottoman Empire, the colourful table wares from Iznik and Kütahya were immensely popular, not only within the Empire but also abroad, partly due to the increasingly thriving trade between the Ottomans and the West. In the

1570s we see the first evidence of interest from Europe in ceramics from Iznik and Kütahya in the form of purchase orders (Atasoy and Raby 1989: 264). Italian cities, such as Venice, Genoa and Florence, were intermediaries in the trade with Western Europe. Genoese merchants, for example, regularly docked their ships in the harbour of Iznik, and purchased about 2,000 pieces of pottery on each occasion. Sometimes the Genoese even had a permanent representative in Iznik, who visited the workshops attempting to obtain or order the goods required (Kırımlı 1983: 50–52). During the sixteenth century, the Dalmatian city of Ragusa was also a major trading partner for the Ottomans. In Istanbul, Iznik and Kütahya Ware was sold by retailers mostly to Venetian and Genoese merchants who had their headquarters in Galata.

In these ways Iznik and Kütahya Wares rapidly found their way through Venice and Ragusa to Germany and the north, as well as to parts of the Mediterranean and beyond. The wares have been found in excavations ranging from Fustat (old Cairo) in Egypt to southern Russia and Waltham Abbey in Great Britain (e.g. Azarnoush-Maillard 1977: 127, fig.35c; Huggins 1969: 93, pl. 1). In addition, some fragments were even excavated in the historical centres of Enkhuizen and Amsterdam in the Netherlands (Gawronski 2012: 305, no. 1190).

Field surveys and excavations in Greece have shown that Iznik and Kütahya ceramics were also popular in this rather peripheral part of the Ottoman Empire. Until now, pottery fragments from Iznik and Kütahya have been found at Athens, at Skyros, at Thessaloniki, at Kalapodi in Lokris and at two rural sites in Boeotia (e.g. Vroom 1996, 1998a, 2000: 209–11, 2003: 176 and 178). Furthermore, fragments of bowls and dishes from Iznik and Kütahya were recovered in sixteenth–eighteenth century rubbish pits at an excavation in Thebes (Vroom 2006, 2007: 81–83, figs 4.12–14). These high-quality ceramics in the Thebes excavation apparently represent the waste of a well-to-do urban household, which was able to import luxury table wares from Turkey, illustrating the trickle-down effect of court fashions in Istanbul to private homes in the provinces of the Empire.

Iznik and Kütahya pottery finds have also been excavated in the Crimea, Rumania, Bulgaria, Hungary and in the Adriatic (e.g. Dubrovnik and Muro Leccese in southern Italy), as well as on the island of Cyprus (Vroom 2005: 158–61, 168–71). These Iznik and Kütahya finds in remote areas of the Ottoman Empire include, for instance, quite well-known fragments from the Monastery of Putna in Roumania, Budapest in Hungary, Belgrade in Serbia, and Provadya in Bulgaria (e.g. Bikić 2003; Vroom 2011, 162, notes 71–77 with further literature).

Apart from these finds from archaeological contexts, there are also the so-called '*bacini*' as an illustration of the distribution of Iznik and Kütahya pottery over the Empire and beyond. *Bacini* is the Italian term for decorated bowls embedded in church façades in both Italy and Greece from the eleventh century onward (Vroom 2003). In Greece, the custom remained popular until Ottoman times. Iznik and Kütahya *bacini* of later date, even up to the Early Modern period, have been found in the walls of churches in Attica and on the islands of Salamis and Hydra, at Methana, on Mount Athos, on the Cyclades, and on the islands of Euboea/Evvia and Skyros (e.g. Carswell 1966; Korre-Zographou 1995: 59, 69–76, pls. 119–24, 130; Kiel 1990).

The uses of Iznik Ware

The distribution of the popular Iznik Ware, spreading from retailers in Istanbul through Venice all the way into Germany and north-western Europe, did have all sorts of consequences. One of those was that the import in Western Europe of this fashionable ware from Turkey gave new impetus to developments in local ceramic manufacture in several European regions. Very profitable imitations of Iznik Ware were, for instance, produced in Italy and in the Netherlands (e.g. Pool 1989; Fontana 2006, cat. nos 188, 189, 190, 192 and fig. 6).

In view of its popularity, it is remarkable that so little Iznik pottery has survived to this day in Turkey. One of the main reasons is probably the amount of devastating fires that ravaged Istanbul from the mid fifteenth to the late nineteenth centuries (Atasoy and Raby 1989, figs 1–2). As it was less expensive than the porcelain the Sultan imported, it was not stored in well-protected cellars like the precious Chinese wares (of which very little was in circulation). Thanks to this, the Topkapı Palace has now the world's biggest collection of Chinse porcelain after Peking and Dresden: 10,600 pieces have survived, while hardly a trace of Iznik pottery has remained (Vroom 2005: 163). The most spectacular and complete pieces of Iznik Ware are now held in Western collections (e.g. Korre-Zographou 1995, pls 102, 135–36; Carswell 1998; Ballian 2006: 128–96). As a result, we have to rely heavily on written sources to establish to what extent Iznik pottery was used at the Sultan's court (Caroll 2000: 170–75; Vroom 2005: 158–61).

Ottoman documents relating to ceramics (that is to say: documents published to date) consist mainly of lists of fixed prices, probate inventories and palace registers, such as treasury accounts, stock-taking records, sale registers, palace kitchen records and inventories of gifts. The earliest dated document mentioning Iznik ceramics in use at the Topkapı Palace can be dated in the year 1489–1490 (Atasoy and Raby 1989: 30). This register lists the types, quantities and prices of items, including Iznik pottery, purchased for the Imperial kitchens.

Another kitchen record from 1582 provides evidence that during special occasions (such as the festivities for the circumcision of the son of Sultan Murad III, which lasted 52 days and nights), 541 extra Iznik plates, dishes and bowls were purchased from the bazaar, in addition to the Chinese porcelain, copperware and Iznik ceramics that were brought out of the Palace kitchens (Figure 9.6.5). This could indicate that a great deal of Iznik pottery was available on the open market, and that the Palace preferred to buy its Iznik vessels from the merchants in the Istanbul bazaar and not from the potters themselves (Atasoy and Raby 1989: 30).

In general, the documents seem to show that Iznik Ware was mainly used as an everyday ware. Even in the sixteenth century, when the quality of fabric and decoration of Iznik ceramics reached its peak, the Ottoman Sultans preferred for special occasions the more valuable foreign wares (such as Chinese porcelain and celadon Ware). Iznik Ware, on the other hand, was stored in large quantities in the Imperial kitchens of the Palace, ready for day-to-day use. The documents refer to 'compote bowls', 'large yoghurt bowls', 'salad and sweetmeat dishes', 'lamb dishes', and to 'dishes for various puddings' or 'for clotted cream' (Atasoy and Raby 1989: 43–47).

The wide success of Iznik Ware as pottery for the urban elite, seems also to be shown by the excavation at Saraçhane in Istanbul. John Hayes has noted in his publication on the Saraçhane material that in the Early Ottoman layers the proportions of glazed wares increased markedly to around 35–40 per cent of all finds, with a further rise to 60–80 per cent in the eighteenth/nineteenth centuries, when glazed wares become predominant (Hayes 1992: 233). Rural sites in the Ottoman Empire seem to show only a moderate increase of glazed sherds during this period (Vroom 2003, table 7.6).

The uses of Kütahya Ware

Towards the beginning of eighteenth century, Kütahya Ware made its way into households in cities and rural areas of the Empire. This new type of glazed decorated tableware consisted of thinly-potted vessels, made of a fine, buff-coloured fabric with polychrome painted designs (in blue, green, red, purple and yellow), usually geometrical, floral or figural. Kütahya Ware was strongly influenced by Chinese porcelain, and is, therefore, sometimes described as a cheap substitute for real porcelain, or 'peasant-porcelain' (Lane 1957: 65).

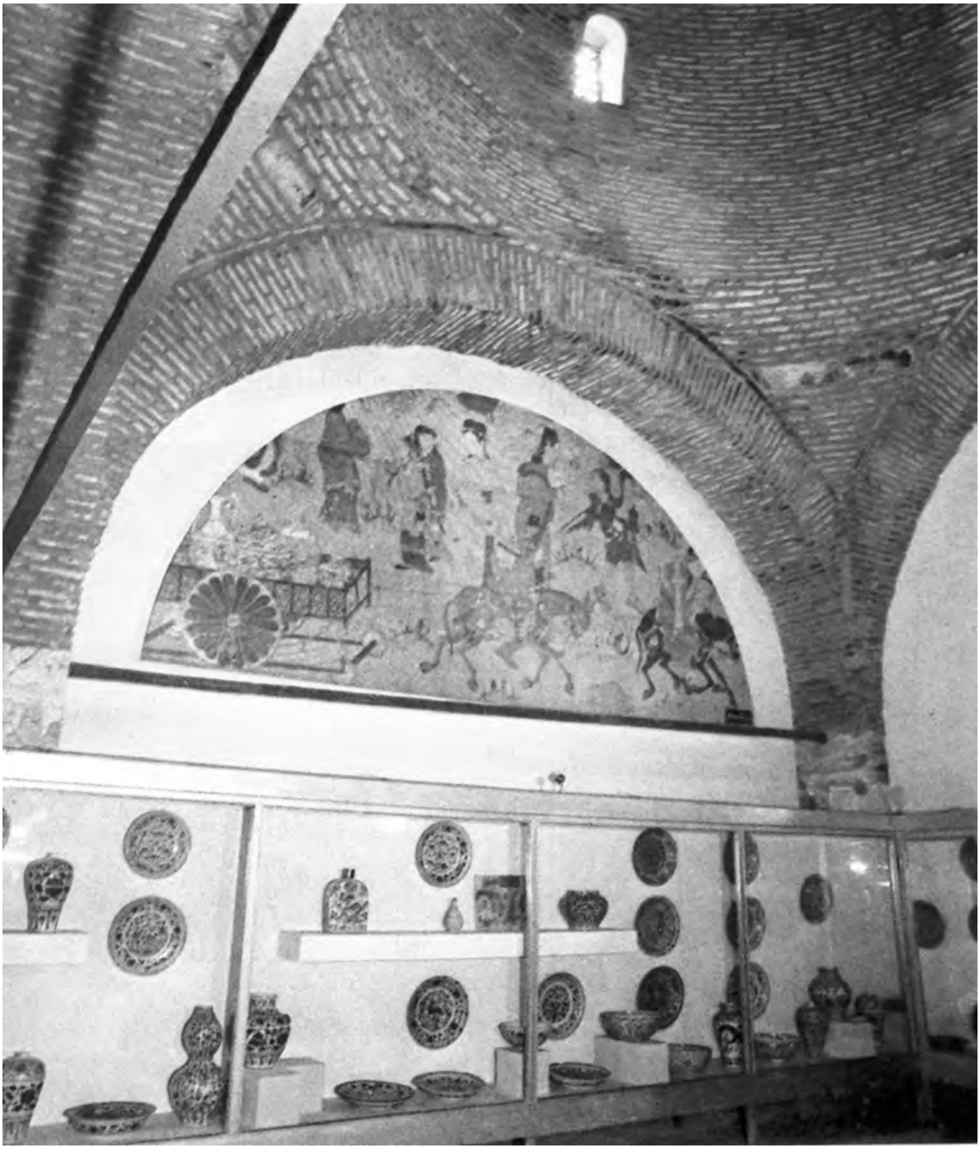

Figure 9.6.5 The porcelain collection of the Imperial Kitchens, Topkapı Palace, Istanbul (J. Vroom)

The majority of the Kütahya production consisted of specialized shapes, such as small cups (often with matching saucers), bowls, jugs, lemon squeezers and coffee pots (Figures 9.6.2a–9.6.2b; see Vroom 2005: 168–71). The small Kütahya cups are clearly related to the spread of coffee-consumption, and their shape was probably taken from Chinese porcelain or from porcelain made at Vienna and at Meissen (Germany) at around 1730–1740 (Lane 1939: 236,1957: 65; see in general, Vroom 1996 for the spread of coffee drinking in the Ottoman Empire).

The delicacy of the Kütahya cups suggests that they were also made for intimate gatherings in Ottoman society, and not only for use in coffee houses and bazaars (Figures 9.6.2a–9.2.6b).

In the eighteenth century, coffee drinking had become part of the Ottoman consumption pattern; it was certainly not confined to coffee houses, but also a common practice in the harem, in the hamam (bathhouse) and at garden parties and picnics (Figure 9.6.3; Vroom 1996; Işin 2003).

In Lady Mary Wortley Montagu's famous Turkish letters from 1718, for instance, remarks on the consumption of coffee are quite frequent. Lady Montagu reported that after the end of meals, she often was offered coffee served in small cups of 'the finest China with soucoups of silver gilt or gold' (Figure 9.6.3). She also noted the metal coffee pots, porcelain cups in filigree holders, and small dishes for offering coffee and refreshments to the guests. Quite understandably, it has been suggested that in the early eighteenth century, Kütahya Ware suited the pleasure-seeking, romantic atmosphere that prevailed among the wealthy classes during the 'Tulip Age' of the Ottoman Empire (Watson 1988; see also Finkel 2005: 346–47 on the 'Tulip Age').

Next to coffee drinking, another innovation in cultural behaviour has left its archaeological traces: the introduction of smoking in the Eastern style. The rapid diffusion of this habit is testified by the many finds of earthenware fragments of the so-called *chibouk* tobacco pipe, which was in fashion throughout the Ottoman Empire from the seventeenth century onwards (Robinson 1985; Vroom 2003, fig. 6.46; Gelichi and Sabbionesi 2014).

Ottoman archaeology and globalization: some concluding remarks

To understand the importance of the enormous 'global' success of Iznik and Kütahya Ware during the sixteenth to eighteenth centuries, both inside and outside the Ottoman Empire, it is helpful to cite the archaeologist Gerald Dunning. He formulated three basic requirements of pottery to be used as an index of long-distance exchange (Dunning 1968: 35). First, the pottery must be distinctive in style of decoration and in ware. Second, it must be readily distinguishable from the pottery of the country to which it is sent. And third, the provenance of the pottery must be known (or definable within limits).

The colourful tablewares from Iznik and Küthaya, which were distributed to cities and rural areas inside and outside the Ottoman Empire, meet all these requirements. Between the sixteenth and eighteenth centuries, the wares were the two most widely traded types of glazed ceramics within the Empire. Both were manufactured in the heart of the Empire (near its capital Istanbul) at a high-technological level and were highly distinctive and distinguishable. The success of both wares illustrates that the Ottoman system was characterized by growing wealth, expanding consumption, increasing complex connectivity and a movement towards integration in a more 'capitalistic' distribution economy (Faroqhi 1995: 73).

On the other hand, 'more capitalistic' was emphatically not 'capitalistic' with a competitive free flow of goods. Both Iznik and Kütahya Ware were state-controlled commodities, completely regulated by the court of the Sultan in Istanbul. The highly centralized, bureaucratic Ottoman government took centralization of the tin-glazed pottery production at Iznik and Kütahya for granted, commissioning orders, regulating fixed (low) pottery prices, supervising the quantity of production and of internal and external trade. It did not encourage the introduction of new shapes or designs, nor the promotion of sales, nor any form of open competition among producers. In fact, there was no real open market of demand and supply; the state owned most of the workshop's capital and supplies. It was only when court patronage decreased that the potters had the opportunity to turn to mass production for a wider market. In contrast, (ethno-)archaeological study of other types of glazed or unglazed ceramics circulating in the Ottoman Empire suggests that the production of some of these wares was mainly locally organized, with more complex patterns of production and trade, varying in accordance to local socio-economic circumstances (e.g. Walker 2009).

The case study of Iznik and Kütahya wares clearly shows that after 1500, pottery-making in the Ottoman Empire evolved from a humble craft producing local wares into a highly skilled 'industrial' activity. The long-distance distribution of these wares to all corners of the Empire, as well as throughout the Eastern Mediterranean and beyond suggests a process of increasing integration and connectivity of the Ottoman system. The extent of this integration, complexity and connectivity, however, had its limits. This became clear when the Ottoman system was drawn into wider economic developments during the late eighteenth century. For the Ottoman Empire, this process of integration in the world-economy became unstoppable and perhaps even unmanageable in the course of nineteenth century, when the Ottoman markets were flooded with European mass-produced wares, including ceramics (Vroom 1998b, 2003: 236–37, 2005: 166–67, 184–89; Bennison 2003, François 2008). The result of this integration was disintegration, and the consequences of a proto-modern system being swept away by modern globalization were enormous, but that is a different story to tell (Toprak 2006).

Still, the 'global' success of Iznik and Kütahya wares shows that the Ottoman Empire functioned over a long period of time as an integrated and well-connected system, distributing its pottery during its heydays between 1600 and 1800 over a large part of the then known world. At the same time the archaeological (and written) data also suggest that the Empire did not follow a linear type of modernization, that it was not fully connected to the emerging capitalist economies, and that it was characterized by forms of complex connectivity which were very much limited to a specific period (sixteenth to eighteenth centuries) and a specific cultural-geographical region (Bennison 2003). Viewed from the perspective of 'globalization', more precisely a perspective of the history of globalization, archaeology may be helped – without being dependent on it – by the concept of 'proto-globalization' to organize its thinking about this bundle of processes, mechanisms and particular forms of complex connectivity evident in the specific time and space of the Ottoman Empire.

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9.7

Pre-modern globalization and the rediscovery of Iranian antiquity

Daniel T. Potts

Introduction

The term globalization has a distinctly modern connotation, suggestive of a world ever more tightly integrated by late capitalist modes of economy, transport and communication. Yet periods of geographically broad and culturally diverse integration – in other words, a species of proto-globalization – occurred during the pre-modern era in many parts of the world (this volume: Feinman, Jennings and Knappett). Prior to the spread of Islam, a number of early empires with their capitals in the Near East facilitated contact on many levels over vast distances that, through indirect relationships with neighbouring states, created social and economic networks extending from the Mediterranean to the Korean peninsula. But the purpose of this chapter is not to review the distribution of exotica across the pre-modern empires of the Near East that illustrate pre-modern globalization. Rather, its purpose is to look at how knowledge production about one ancient empire – that of the Achaemenids – saw Iran and Iranian antiquity become part of a phenomenon of knowledge globalization, pre-dating and post-dating the European Enlightenment, by both European and Iranian intellectuals.

Prolegomenon to the study of pre-Islamic Iran: from history to myth

Long before any 'modern' gazed on the standing remnants of Xerxes' Hall of 100 Columns at Persepolis, writers like Herodotus, Xenophon, Strabo, Diodorus Siculus, Quintus Curtius and Arrian had ensured that the magnificence of the site was widely known, if only in the mind's eyes of their readers. Alexander the Great's conquest of the Persian Empire and his destruction of Persepolis ensured that the site passed abruptly from a living, functioning imperial power seat to that of an archaeological monument. Roughly 600 years after Persepolis had been abandoned nobody in Iran knew anything of its true history. This can be inferred from a Middle Persian text inscribed in 311 CE in the ruins of Persepolis by Shapur, king of the Sakas, Hindustan and Turan, and son of the Sasanian ruler Hormizd II (Frye 1966). In the text Shapur says that, while on his way from Istakhr to Sakastan along with other Saka and Persian noblemen, 'he had lunch in this building' and 'ordered rites performed for the gods'. In addition, he 'gave blessings to his father and ancestors' and 'to him who built this structure' (Frye 1966: 85), clearly unaware of who that actually was.

Four centuries later the Achaemenids had well and truly passed into the realm of myth. In his *Shahnāma*, or Book of Kings, probably finished in 999 CE, the great poet Ferdowsi ascribed the ruins of Persepolis to the mythological figure Jamshid (Yima of the *Avesta*), calling the site Takht-e Jamshid or Sad Situn, '100 columns'. Although the Achaemenids had been forgotten, their ruins were still imposing and many who passed by them were struck with wonder and awe. 'Adud al-Dawla and Baha' al-Dawla, two rulers of the Buyid dynasty that governed large parts of Iran in the tenth century, visited Persepolis in 954 and 1002, respectively, and left inscriptions on one of the doorways of Darius' palace (Donohue 1973). While serving as governor of Fars, the Timurid Prince Ibrahim Sultan b. Shahrukh, a grandson of Temür (i.e. Tamerlane), encamped at Persepolis in September 1423, and left three graffiti, one of which was a verse by the celebrated thirteenth-century Shirazi poet Sa'di (1184–1291) (Minorsky 1939: 177). Just over half a century later, in 1476, another governor of Fars, Sultan Khalil, son of Uzun Hasan, head of the Aq Qöyünlu confederation, visited Persepolis. Jalal al-Din Muhammad b. As'ad Davani's *Ardnāma* describes a review of troops under the Sultan Khalil at Persepolis, or Istakhr as it was called in accounts of the Islamic era. Davani noted in particular that,

> When the august parasol reached Istakhr of Fars, Sultan Khalil spent one day at that place of astonishing vestiges admiring the wonderful images. Some chronicles say that in the times of Iranian kings this place was called "thousand columns". It was built in the time of Jamshid, who, according to some historians, is Solomon.
>
> *(Minorsky 1939: 150)*

But Davani noted that Sultan Khalil's greatness eclipsed even that of Jamshid:

> when this place became lit up with the light of the sun of the victorious banner and with the little moon of the felicitous standard, the memory of Jamshid was eclipsed. The figures (on the rocks) stood bewildered, perhaps even vanished from their places, and the images, overcome in the presence of such company, entered the walls, perhaps disappeared from them altogether. No, on the contrary, the images must have recovered a new life from the advent of the king!
>
> *(Minorsky 1939: 151)*

And like many later Western visitors to Persepolis (Simpson 2005), Sultan Khalil spent a bit of time perusing the graffiti of previous tourists, including the verses inscribed by Ibrahim Sultan, 'in his own writing on some parts of the ruins, and gave orders to . . . Prince Abul-ma'ali Sultan 'Ali-Mirza, great expert at calligraphy, to write a few lines of appropriate poetry opposite that writing' (Minorsky 1939: 151). Copied in 1667 by Samuel Flower, an East India Company agent, these lines were published for the first time in the pages of the Royal Society's *Philosophical Transactions* in 1693 (Flower 1693: 775).

The European recovery of ancient Iran

Unlike Ibrahim Sultan, Sultan Khalil or Davani, Western writers had the advantage of access to ancient sources that drew upon eyewitness reports. Just a few years after the beginnings of printing at Subiaco near Rome, in 1464, Latin translations of Strabo's *Geography* (Milanesi 1994: 444) and Herodotus' *Histories* (Fryde 1983: 92) appeared, in 1469 and 1474, respectively, followed quickly by Quintus Curtius' *Life of Alexander* in 1470 or 1471 (Baynham 1998: 4, note 13). By 1591, Barnabé Brisson published his *De Regio Persarum Principatu* in which all of the data on the history and ethnography of the Persian Empire contained in the major Greek and Latin sources was synthesized. Fourteen years later, in 1605, Filippo Ferrari published his *Epitome geographica*. This landmark historical geography work was followed by his *Novum lexicon geographicum* in 1627, with subsequent editions in 1657, 1665 and 1697. Thus when, a few years later, European travellers, merchants and diplomats began visiting Iran regularly, the major sites of the Persian Empire, Persepolis in particular, became sought after destinations, the ruins of which could be compared with ancient descriptions.

Between 1600 and 1800 descriptions of Persepolis appeared in no fewer than 26 books published by European travellers (Sancisi-Weerdenburg 1989; cf. Mousavi 2012: 95-122). As Jean Chardin, who spent long periods of time in Iran in 1666 and 1672–1673, wrote, nothing was easier than recognizing the layout of Persepolis in the descriptions given by Arrian, Quintus Curtius and Diodorus Siculus, and it was a great pleasure to cross the country with copies of these ancient authors in one's hand (Chardin 1811/8: 242–43). The extent of European familiarity with Persepolis is perhaps best reflected by a challenge issued in 1693 in the *Philosophical Transactions* which read, 'there being already good Descriptions in Words of the Excellent Pictures and Basse Relieves that are about Persepolis at Chilmenar', what was now needed was a draughtsman 'sufficiently skilled in those parts, that might be engaged to make a Draught of the Place, and the Stories their pictur'd and carved' (Flower 1693: 775).

The publication of these works naturally exerted something of a multiplier effect. In Engelbert Kaempfer's case, for example, the record of the auction of his library in 1773 shows that he owned copies of other travellers' accounts, including those of Jean Chardin, Joan Cunaeus, Adam Olearius, Jean-Baptiste Tavernier, Jean Thévenot and Pietro della Valle (Wiesehöfer 1993: 115–17). There seems no question that the knowledge of the great Achaemenid Persian sites, accessible to Early Modern European readers via Herodotus, Strabo, Diodorus, Quintus Curtius and Arrian, was greatly amplified by the huge body of travel literature generated by European visitors to Iran from the seventeenth century onwards, much of it available in more than one European language. Increasingly, moreover, stories of Cyrus, Cambyses, Darius I, Xerxes, Artaxerxes and Darius III, were subjects of both English plays and Italian operas from the late sixteenth through the eighteenth centuries (Towers 1910; Piemontese 1993; Orr 2000, 2001), even if these added nothing to real historical knowledge.

Persepolis continued to play an important role in the eighteenth and nineteenth centuries. Carsten Niebuhr spent 24 days there documenting the site in 1765 and his careful drawings helped to further spread knowledge of its monuments (Niebuhr 1778). It would be almost another half-century before the first excavations were undertaken there, in 1812, by James Morier and Robert Gordon, who had read descriptions of the site in the works of Jean Chardin and Cornelis Le Bruyn (Curtis 2005: 254). Using the ready supply of labour provided by their artillery soldiers, Morier, who was serving as secretary to Sir Gore Ouseley, envoy to Fath Ali Shah, cleared the passage in one of the Achaemenid royal tombs above the site while Gordon employed local labourers to clear an area in front of the staircase, which Morier had already excavated, discovering a sculpture fragment with part of a chariot drawn by two horses (Morier 1818: 248) that was eventually brought back to London and is today in the British Museum. After two days of work, however, excavations were terminated by the governor of Marv-Dasht, who objected that the Englishmen had no central government permit (Adle 2000).

Spurred by territorial losses to Russia in the Caucasus during the first quarter of the nineteenth century, Abbas Mirza (1789–1833), crown prince and commander of the Iranian army, began to agitate for military modernization and Westernization. Among other things, this brought the young Henry Creswicke Rawlinson to Iran in 1833 as part of a military mission to train the Shah's army. Delayed *en route* from Bushehr to Tehran by snow, Rawlinson took the opportunity to visit Persepolis where he had his first encounter with the cuneiform inscriptions that he would, in a few years time, successfully decipher on the basis of his later work at Bisotun, the inscriptions of which he copied between 1835 and 1837 while training three Kurdish regiments for Bahram Mirza (1806–1882), the governor of Kermanshah (Rawlinson 1898: 56).

From this point onward the rediscovery of Iranian antiquity proceeded rapidly. In 1839 the French draughtsman Eugène Flandin and architect Pascal Coste accompanied the Count de Sercey's embassy to Iran, spending the second half of 1841 documenting a large number of Persian monuments, both ancient and modern (Flandin 1841–1854). Excavations at Susa were undertaken in 1850–1852 by William Kennett Loftus but, despite his discovery of Darius I's palace (Loftus 1856, 1857), the work was terminated by Rawlinson on the grounds that nothing much of interest had been found. In the autumn of 1874 the German inventor and photographer, Franz Stolze (1836–1910), went to Iran as a member of the Prussian Ministry of Culture's expedition to photograph the transit of Venus in Isfahan (Kiepert 1877). He had previously arranged to meet the eminent Iranologist F.C. Andreas at Persepolis and other sites in the area to photograph the Sasanian inscriptions there. Armed with, among other things, one of the second-generation photogrammetric cameras developed by Albrecht Meydenbauer, Stolze photographed Farhad Mirza's Persepolis excavations in 1878, discussed below (Henning 1952: 152, n. 2). In 1884, Nasr ed-Din Shah (r.1848–1896) granted the French engineer Marcel Dieulafoy authority to resume excavations at Susa and these were undertaken from 1884 to 1886 (J. Dieulafoy 1888; M. Dieulafoy 1890/1891). More importantly, Nasr ed-Din Shah sold an exclusive concession for excavations to the French legation on 12 May 1895 in return for 50,000 gold Francs (Nasiri-Moghaddam 2004). The *Délégation scientifique française en Perse* was founded in 1897 under the direction of mining engineer and polymath, Jacques de Morgan, and in 1900 a new agreement was confirmed with Nasr ed-Din Shah's successor, Mozzaffer ed-Din Shah, which additionally granted unconditional ownership of the finds discovered, with the exception of any made of gold or silver for which a payment was required (Abdi 2001: 54; Nasiri-Moghaddam 2004). The French monopoly persisted until October 1927, when it was cancelled by mutual agreement under Reza Shah (Nasiri-Moghaddam 2013: 121). The demise of the Qajar dynasty witnessed a floruit of archaeological exploration in Iran by foreign scholars (Mousavi 2013: 8–9) that moved knowledge of Iran's antiquity beyond the purview of the Classical sources into the uncharted realm of the region's prehistory and pre-Achaemenid cultures.

Nineteenth-century Iranian intellectuals and Iran's pre-Islamic past

In the nineteenth century, heightened awareness of Iran's pre-Islamic past amongst educated Iranians was kindled by two phenomena associated with what may be broadly termed 'modernity'. In the first case, modernity came to Iran in the form of photography. In the second case, Nasr ed-Din Shah discovered European approaches to its own antiquity during three diplomatic missions to the courts of Europe.

In 1839 the Académie française announced the invention of the daguerreotype process and William Fox Talbot presented his silver chloride 'sensitive paper' process. Shortly thereafter, both Queen Victoria and Czar Nicholas I sent cameras as presents to Mohammad Shah (1834–1848). Jules Richard (*aka* Rišar Khan; Mahdavi 2010), a French translator and photographer resident in Iran since 1844, was introduced to Mohammad Shah, who asked Richard to put the cameras in order and photograph him. His son Nasr ed-Din learned to use the cameras and in 1850, two years after succeeding his father on the throne, Nasr ed-Din Shah ordered

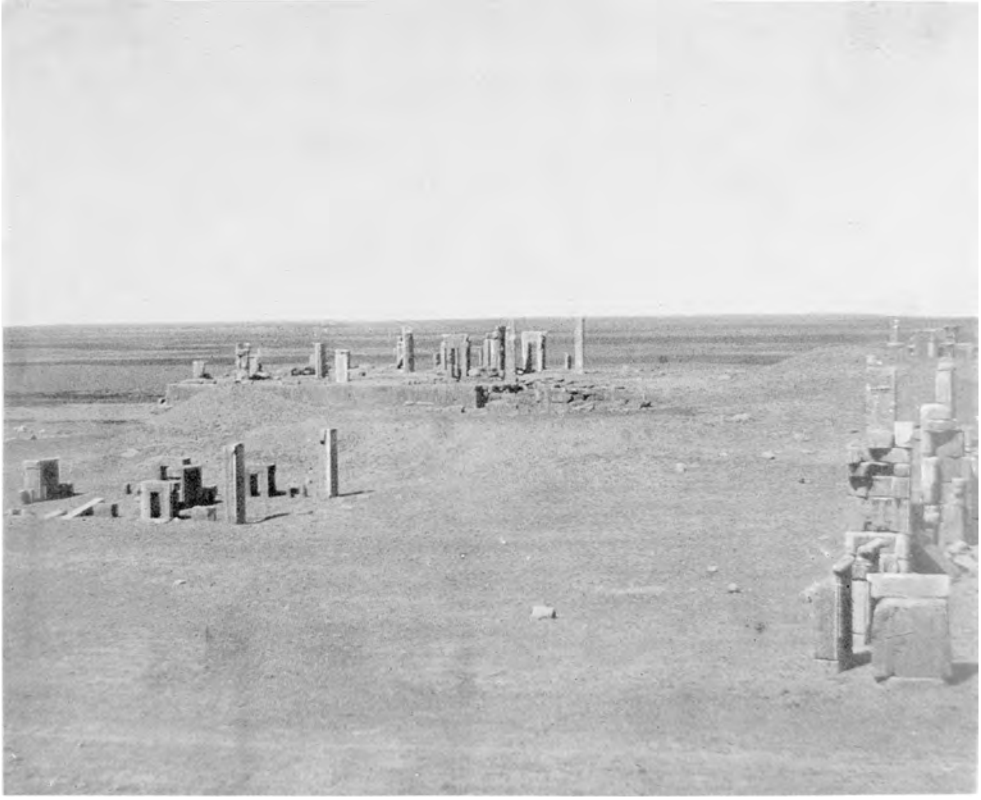

Figure 9.7.1 Persepolis. Photo by Luigi Pesce, 1858. Image © The Metropolitan Museum of Art

Richard to photograph the Persepolis reliefs (Adle 2000; Mousavi 2002: 217). In spite of this command, the funds needed to execute the commission were not forthcoming and Richard never photographed Persepolis. Soon afterwards, the Italian officer Luigi Pesce took his own set of photographs at Persepolis (Figures 9.7.1 and 9.7.2) and Pasargadae, the first ever taken, and presented them to the Shah in 1858. A year later, while in Europe, Nasr ed-Din's special minister Farroukh Khan, known as Amin al-Dowleh, 'Trustee of the Empire', hired the French photographer Francis Carlhian (1818–1870) to teach photography at the Dar al-Fonoun or 'House of Skills' (Gurney and Nabavi 1993) which Nasr ed-Din's Prime Minister Amir Kabir (1807–1852) had established in 1851 as the first higher learning institution in the country, focusing on medicine, engineering, geology, officer training and language training for interpreters. A chemistry laboratory was established and, beginning in 1860, Carlhian taught Nasr ed-Din Shah the collodion method. He also trained Aqa Reza (1843–1884), who became the first professional photographer in Iran. Whereas Pesce documented the well-known remains at Persepolis, Nasr ed-Din Shah himself may be considered Iran's first true archaeological photographer. Late in the summer of 1859 he, and possibly Aqa Reza, took photographs of excavations he had initiated at Khorheh, employing 11 workmen (Adle 2000). When it is remembered that the Photographischer Verein in Berlin was only founded in 1863, these precocious developments in the field of photography become even more impressive.

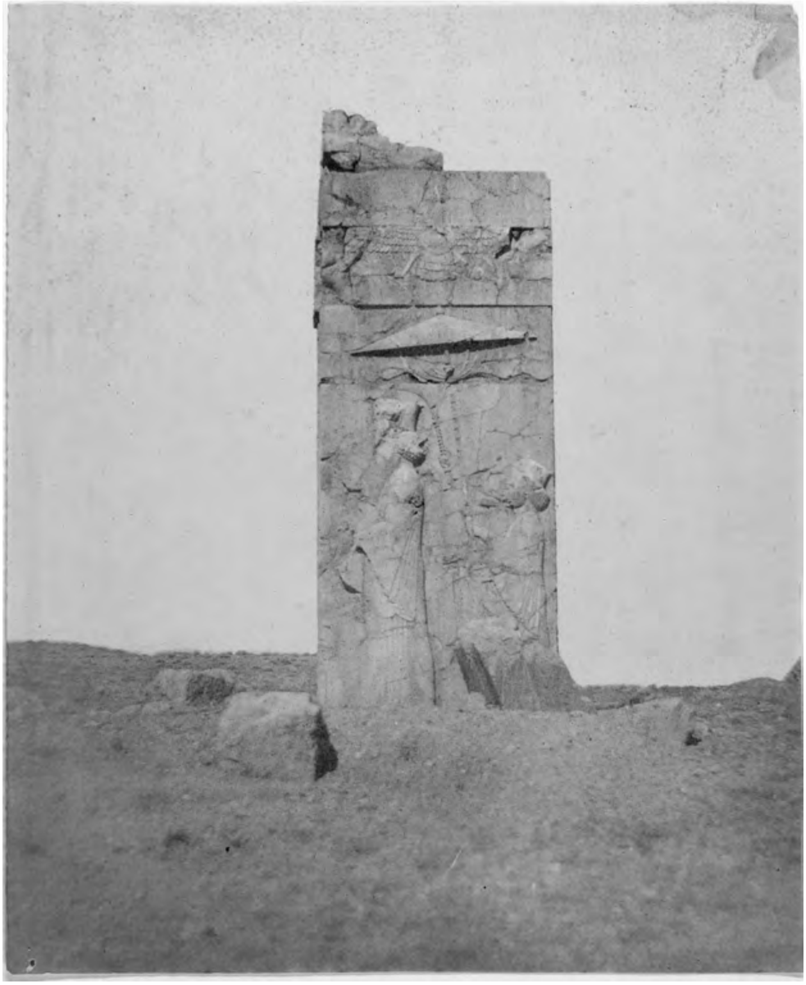

Figure 9.7.2 Persepolis. Photo by Luigi Pesce, 1858. Image © The Metropolitan Museum of Art

Surprisingly, it took another quarter of a century before Nasr ed-Din's predilection for photography and antiquities received a new and important stimulus in the form of extended exposure to an important phenomenon in the West's engagement with modernity, namely the museum. In 1873, on his first visit to Europe, Nasr ed-Din Shah visited no fewer than nine museums, in Astrakhan, Moscow, St. Petersburg (the Hermitage), Berlin, Brussels, Geneva, London (Tower and Windsor) and Bologna. In Moscow, he visited the Dashkov Ethnographic Museum, the creation of Anatoly Bogdanov, a brilliant young zoologist and anthropologist and professor at the University of Moscow, who was inspired to create an exhibition of the peoples of the Russian Empire by what he saw at the 1859 Crystal Palace Exhibition. With funding from minor nobleman Vasily Andreyevich Dashkov, the exhibition opened on 23 April 1867 and soon metamorphosed into a permanent museum under Dashkov's direction (Knight 2001). In his officially translated memoir of this journey, prepared by the eminent Orientalist

J.W. Redhouse, Nasr ed-Din commented on the ‘wax images of all the different tribes and nationalities subject to Russia, each dressed in its special local costume, so as to look like living men’, as well as on ‘the arms and implements of the savages of America and Africa, which are exhibited as curiosities’ (Redhouse 1874: 40).

In Berlin the Shah was lodged in the Stadtschloß. When the Shah went to view the world famous Pergamon Museum, he was greeted by the eminent Egyptologist Karl Richard Lepsius, whom he described as ‘the Director, an aged person named Lepsinius’. In his memoirs the Shah noted,

> On the walls of the staircase of the building there are designs and scenes, very beautiful and old, drawn on the surface of the plaster. Going upstairs, we walked about. There was a crowd. Plaster figures, small and large, all imitatively prepared after the works of Greek and other artists, were there in great numbers. Other objects also, in porcelain, crystal, ivory, amber, wood, etc., were seen.
>
> *(Redhouse 1874: 94)*

In London the Shah visited the Tower of London,

> now used as a museum. There are in it the arms and implements of (all) nations, – even many of the daggers, straight and curved, and of the knives of Persia, – all arranged with great taste. Skins of celebrated horses of antiquity, ridden by such a hero, or by such a king, are made up into the very likenesses of the horses themselves, and stand there. Helmets, armour, horse-armour, weapons, complete and from head to foot, as worn of old by the champions of the Franks and others, are there (exhibited).
>
> *(Redhouse 1874: 134)*

He saw Windsor Castle and its ‘museum of arms and armour’ (Redhouse 1874: 151). At the Invalides in Paris he noted that in the museum,

> they have collected and arranged specimens of ancient and modern cannon, with inventions relating thereto, ancient weapons of commanders and champions of old, quantities of armour for man and horse, all ticketed with a number and with the names of their owners.
>
> *(Redhouse 1874: 235)*

He marvelled at the meticulous arrangement of ‘every bird . . . small or large, that is on earth, from the little humming-birds of the New World, up to the ostrich’ at the Jardin des Plantes in Paris (Redhouse 1874: 263). And after seeing the snakes, arranged in an extraordinarily lifelike fashion, he wrote,

> whether large or small, every thing in that museum is a real animal, such as the Lord of the universe created it; and the Franks have really, with great trouble and at a fabulous expense, brought them together from the uttermost parts of the earth, for the advancement of knowledge, the increase of observation, and the display to the people of God’s power in His wondrous works of creation; the same unceasing care being bestowed upon their safe-keeping. Truly have they incurred great trouble therein.
>
> *(Redhouse 1874: 265)*

Moreover, Nasr-ed Din Shah commented upon,

> The megatherium . . . an animal that lived on the earth before Noah's flood, of the same family as the elephant, but larger and without a trunk. They have discovered its bones, and have placed them in (the museum of) the zoological gardens.
>
> *(Redhouse 1874: 266)*

Finally, in the library of Bologna, the Shah saw things that 'have been recovered from the cemeteries of Bologna itself', 'objects usually found in museums'.

> The bones of several dead persons, so cleaving to the earth, have been brought forth, and set up on foot. In the hand of one of these dead men there was a copper coin of the period. . . . Another of the dead, that had been a woman, has, as I saw, a necklace on her neck, together with a ring on the bone of her finger.
>
> *(Redhouse 1874: 354)*

In 1877, just four years after Nasr ed-Din Shah's first visit to Europe, his uncle Farhad Mirza Mo'tamad al-Dawla (1818–1888), Fars governor from 1876 to 1878, left a beautiful inscription in the *tačara* palace of Darius at Persepolis which records that he 'came to Persepolis, and commissioned several thousand workmen to clear away the earth which had been heaped up through countless centuries on this platform, so that foreign and national travellers might view the carvings' (Mostafavi 1978: 228; Mousavi 2002: 219). It is probably no coincidence that Farhad Mirza had hosted Flandin and Coste during their travels documenting Iranian monuments in 1841 (Mousavi 2002: 219). Whether the Shah's own experiences as a tourist in Europe's leading museums may have influenced Farhad Mirza's decision to undertake this work is unknown. A second inscription, left by Farhad Mirza's brother and dating to 1878, says that Farhad Mirza

> arrived from Shiraz with the object of surveying these buildings. Some of the stone carvings and monuments in the course of time, and through the passage of ignorant people, had become obscured with earth, which he ordered to be removed, and not only this part of the site, but all the abode of Jamshid . . . was cleared of deposited earth . . . and what was damaged was restored.

In the following year Farhad Mirza's brother Sultan Ovais Mirza 'came to this ancient site in order to view and examine some of the monuments' (Mostafavi 1978: 229; Curtis 2005: 255). A decade later the young E.G. Browne, later Sir Thomas Adams Professor of Arabic at Cambridge and author of numerous works on Iranian literature, society and politics, noted,

> Here and there excavations have laid bare long-buried chambers. Some of these excavations were undertaken by the command of Ferhád Mírzá, the Sháh's uncle – less, I fear, from a disinterested love of antiquarian research than from a hope of finding treasure, which, according to the universal belief of the Persians (based, perhaps, on traditions embodied in Firdawsís *Book of Kings*), is concealed in the neighbourhood.
>
> *(Browne 1893: 254)*

In 1878, Nasr ed-Din Shah made a second visit to Europe. At Tbilisi he visited the museum, the director of which, 'who spoke French well, showed us everything'. This can only have been the eminent German naturalist Gustave Radde who had established the Caucasian Museum in 1865 (Radde 1899; Uwarow 1902). 'Inside the museum were many instruments and tools, and rare and curious articles, old and new, of different nations and countries, stuffed animals and all kinds of objects representing arts and sciences', the Shah observed:

> The exhibition was a most interesting one. For instance, there were various birds and many animals, great and small, leopards, tigers, boars, bisons, large Jonah's fish (whale) of the Black Sea – a very strange animal indeed. There was a stuffed camel represented lying dead, vultures, crows, foxes and jackals sitting on its carcase and eating its flesh; so skillfully made to resemble nature that one could hardly help mistaking the animals for real. There were also specimens of minerals and plants and trees, most of them from the Caucasus, beautifully arranged.
>
> *(Houtum Schindler and de Norman 1879: 84)*

Another natural history museum was visited in Warsaw,

> founded by the kings of Poland sixty or seventy years ago, and completed by the Russians. The museum has a fine collection of American, African, and other quadrupeds, many kinds of birds, shells, fishes, and animals; there are no live animals there, but dead ones prepared so as to resemble life, and preserved with their feathers or skins in glass-cases. I looked carefully at every object.
>
> *(Houtum Schindler and de Norman 1879: 118–19)*

In Paris the Shah visited a museum in the lower story of the Hôtel Pavillon de Henry IV, where the director showed him 'some relics of the ancient Romans and Gauls of France'. This was the Museum of Celtic and Gallo-Roman Antiquities established in 1862 by Napoleon III. The Shah was impressed by the weaponry, particularly

> a large collection of ancient implements, dug out of the ground, or found elsewhere, dating from a period anterior to, or contemporary with, the flood. The period before the discovery of iron was represented by stone hatchets, axes, and arrow-heads, and other objects, which are at the present day made of iron. There were also many pieces of ancient earthenware, old coins, weapons, and a multitude of articles quite impossible to enumerate. It was a very interesting sight.
>
> *(Houtum Schindler and de Norman 1879: 213–15)*

In Vienna Nasr ed-Din Shah visited the museum,

> walking from room to room, looking at all the beautiful and valuable objects tastefully arranged in glass cases. Every case has separate doors and locks. When I wished to look at some objects minutely, the treasurer opened the lock and took them out of the case. There were many antiquities, old coins, antique gold and silver articles, ancient weapons found underground and at other places, jasper carvings, and vessels made of stone more valuable and beautiful than jasper, and of many colours resembling precious stones.
>
> *(Houtum Schindler and de Norman 1879: 241–42)*

The Shah also visited a museum of antiquities in the Austro-Hungarian capital that contained

> ancient stone implements, Egyptian and Roman tombs, and many other objects. The director of the museum conducted us over it, and explained all the different things. There were many ancient weapons. This building was also one of Prince Eugene of Savoy's palaces, and has since then been converted into a museum. They are now beginning to construct two other museums at Vienna, both fine and extensive buildings, which are to be finished two years hence, and they intend to collect the pictures of the Belvedere, the objects of the museum here, and those of all other museums, in the new ones.
>
> *(Houtum Schindler and de Norman 1879: 246)*

Finally, the Shah visited the museum at the arsenal. This was

> a museum of ancient implements and arms of all kinds and shapes. Every object has a number attached to it, and a description of it can be found opposite to its number in a printed object. Any object of which I asked an explanation was immediately looked up in the catalogue by Crenneville [Graf Franz Josef Folliot von Crenneville, appointed grand chamberlain of the Emperor Franz Josef in 1867, 1815–1888] who then gave the explanation,
>
> *(Houtum Schindler and de Norman 1879: 249)*

During the Shah's third and final visit to Europe in 1889 his longtime physician Joseph Tholozan expressed an interest in remaining in Paris and recommended as his replacement a young French military doctor, Jean-Baptiste Feuvrier, who joined the Shah's service for three years. Feuvrier's memoirs, published in 1900, contain a number of interesting observations. When Feuvrier arrived in Tehran he found that, around a square garden, the Shah had three palaces, one built in the style of Louis XVI, and a museum. The walls of the buildings in between were decorated with glazed brick reliefs modelled on those showing the archers in Darius' palace at Susa (Feuvrier 1900: 149) which Marcel and Jane Dieulafoy had discovered several years earlier and which the Shah had seen at the Louvre during his 1889 European visit (Abdi 2001: 54). The museum itself was more a royal cabinet of curiosities containing a profusion of French, German and other European porcelain and *objets d'art*, many of which the Shah had acquired on his journeys. Antiquity, Feuvrier noted, was represented by some coins and vessels in different materials, including some in gold and a large number in black ceramic 'trouvés dans les fouilles' (Feuvrier 1900: 173–74). The prized possession was the crown of Fath Ali Shah, second shah of the Qajar dynasty and Nasr ed-Din Shah's grandfather.

Feuvrier described visiting Nehavand, in Luristan, near which was a tumulus excavated by (i.e. for) the Shah, despite the fact that it had been investigated previously by the Shah's younger brother, Abdol-samad Mirza Ezz ed-Dowleh Saloor (1843–1929), governor of the Nehavand region from 1874 to 1876. The tumulus was described as *c.*40 m in diameter and 10 m high. Feuvrier described entering the tomb with precise dimensions of the chamber and lamented that it must have been emptied entirely by Nasr ed-Din's brother (Feuvrier 1900: 388–89). Told that the previous excavators had found skeletal remains, which had been thrown away, they were also informed that some badly preserved weaponry had also been discarded. Nevertheless, they persisted in the excavation and recovered a large left femur, part of the parietal, a fragment of a tibia, a dozen phalanges and small bits of long bones (Feuvrier 1900: 391).

In May, 1892, Feuvrier was at Mahallat when Prince Manouchehr Mirza, a cousin of Nasr ed-Din Shah's, visited the ruins at Khorheh, accompanied by Mirza Foroughi, secretary of

Etemad es Saltaneh and head of the Dar-al Tarjomeh or Office of Translation (Milani 2008/2: 152). After an interval of 32 years, Nasir ed-Din Shah ordered a second season of excavations at Khorheh in 1892 (Adle 2000; Prandi 2007), and at Nehavand as well. Although these excavations revealed few remains of architecture, they did recover a large quantity of human remains, including a well-preserved cranium, and eight copper or bronze, 5–7 cm long arrowheads, all of which Feuvrier donated to the Museum of Natural History (Feuvrier 1900: 367). This was presumably the 'museum of natural history' at the palace of Saltanetabad, the largest of Nasr ed-Din Shah's palaces outside of Tehran (Feuvrier 1900: 261).

While Nasr ed-Din Shah may have been the most prominent nineteenth-century Iranian to take an active interest in his country's remote past, there certainly were others. Of these, perhaps the most genuinely proficient was the poet, artist and scholar Mirza Mohammad-Nasir Hosayni Shirazi, better known by his pen name Forsat-al-Dawla (1854–1920). In addition to mastering English and studying extensively in the natural sciences, Forsat learned some cuneiform from the Dutch businessman Henryk Dunlop, who was based in Shiraz, as well as Greek and some Middle Persian from a Mr Blackman who was employed by the Indo-European Telegraph Company (Kasheff 1999). An accomplished draftsman, painter, photographer and surveyor, Forsat made drawings and paintings of archaeological sites, as well as topographic plans, a selection of which were published in *Athar-e 'Ajam* in 1892–1893 and generally considered the first 'Persian manual of archaeology' (Henning 1952: 153).

Other members of the Qajar intelligentsia reimagined their own past, often with input from Western sources. Perhaps the most important exponent of this tradition was Mirza Fath 'Ali Akhundzadeh or Akhundov (1812–1878), a prominent Azerbaijani playwright and atheist. Although Akhundzadeh lived most of his life in Tbilisi, Georgia, was an ardent Russophile, and wrote in Azeri Turkish, his parents came from Iran and he was intensely proud of his Iranian roots. Moreover, he was bitterly opposed to Islam and the Arabs. In 1864 Akhundzadeh published a series of fictitious letters between an Indian prince named Kamal al-Dawlah and his Persian counterpart, Jalal al-Dawlah. Conflating the legendary history of the pre-Islamic Sasanian dynasty with that of the Achaemenids as filtered by the ninth-century Zoroastrian holy books, the Indian prince asks the Persian where the glory of the heroic age of Gayomart, Jamshid, Gushtasp and Xosrow Anushirvan, chronicled in Ferdowsi's *Shāhnāma*, have gone. As Juan Cole has observed, Akhundzadeh wrote of the

> just and efficient administrative and tax-collecting machinery of the Achaemenids, painting a golden age wherein no injustices were done to any subject. . . . He says that the emperor maintained a system of hospitals, some for men, and others for women, where all the sick and disabled were treated, and in all the kingdom there was no beggar. . . .The king set aside one day a week to hear the petitions of ordinary subjects, and had made an extensive corpus of just legislation. The empire stretched from Central Asia to Syria, and from the Bosphorus to the Punjab. Now all this splendor is gone.
>
> *(Cole 1996: 39–40)*

'Iran's people,' writes Cole, paraphrasing Akhundzadeh, 'were once free *(āzād)* within the country and respected without, but this past greatness can [now] only be gleaned from Greek works, since the Iranians themselves had forgotten their kings, books and laws' (Cole 1996: 39). The reference to Greek works is surprising, for although Cole speculates that Akhundzadeh may have used a Russian translation of Herodotus, it seems clear that he has projected back onto the Achaemenid period legends extolling the virtues of the Sasanian emperor Xosrow Anushirwan from Middle Persian *andarz* or wisdom literature. This being the case, one must then ask then how Akhundzadeh accessed this in nineteenth-century Georgia? One possibility is that a window on this material opened up through his correspondence with Maneckji Limji Hataria, the Tehran representative of the Bombay-based Persian Zoroastrian Amelioration Fund, for we know from Akhundzadeh's autobiography that they discussed Zoroastrian matters and shared a mutual hope that 'our homeland will be purged of the followers of the alien faith [Islam] and again become a rose garden with the justice of yore prevailing anew' (Algar 1984).

In 1866 Akhundzadeh sent a letter to the editor of an Iranian newspaper criticizing him for using a 'picture of a mosque . . . as a symbol of the Iranian nation' since mosques were common to all Muslim peoples. More suitable choices from the pre-Islamic era, he wrote,

> are ancient Persian monuments, that is to say, Persepolis, the castle of Istakhr, and so on. After Islam, one of the most famous monuments is that of the Safavid kings. . . . So it is imperative for you to find a symbol to represent, on the one hand, the ancient kings of Iran and will recall, on the other, the Safavid rulers — such as the picture of the twelve-crested crown of the Qizilbash of red broadcloth.
>
> *(Cole 1996: 38)*

Other Qajar-era intellectuals shared similar views. In 1875 'Abdu'l-Baha 'Abbas (1844–1921), son of the Baha'i prophet Baha' Allah, published a work entitled *Hidden secrets of the causes of civilization* (Gail 2007) which expresses sentiments very similar to those of Akhundzadeh. 'O people of Persia!' he wrote,

> look into those blossoming pages that tell of another day, a time long past . . . Iran in that day was at the heart of the world; she was the bright torch flaming in the assemblage of mankind. . . the splendor of her learning cast its rays over East and West. . . . The greatest of the world's philosophers marveled at the wisdom of her government, and her political system became the model for all the kings of the four continents then known. . . . Aside from that which is a matter of record in Persian histories, it is stated in the Old Testament—established today, among all European peoples, as a sacred and canonical Text—that in the time of Cyrus, called in Iranian works Bahman son of Isfandiyar, the three hundred and sixty divisions of the Persian Empire extended from the inner confines of India and China to the farthermost reaches of Yemen and Ethiopia . . . according to that authoritative Arab work, the history of Abu'l-Fida, he took over the entire known world. . . . As attested by the annals of the world's most illustrious peoples, the first government to be established on earth, the foremost empire to be organized among the nations, was Persia's throne and diadem. O people of Persia! Awake from your drunken sleep! Rise up from your lethargy!'

It goes on exhorting Iran to follow their king, Nasr ed-Din Shah, 'hoping that his reign will rival the glorious past' (Gail 2007: 10–16).

Around 1886, 'Abd al-Baha returned to this theme in *A traveller's narrative*, a work that became available in English as early as 1891 thanks to a translation by the noted Cambridge Iranologist E.G. Browne. There 'Abd al-Baha wrote very pointedly about Achaemenid Iran:

> In the time when the mighty government of Persia did not interfere with [men's] consciences, diverse sects entered in and abode beneath the banner of the great king, and [many] different peoples reposed and served under the shadow of that mighty government's

> protection. The extent of the empire increased from day to day; the greater portion of Asia was under the just rule of its administration; and the majority of the different religious and races were [represented] amongst the subjects of him who wore it crown.
>
> *(Browne 1891: 160–61; Cole 1996: 45)*

Conclusion

The example of Iran's Achaemenid monuments and history highlights two important trends in the globalization of knowledge and, by implication, the place of archaeology within contemporary globalization discourse. Long before the Enlightenment, two of Iran's most prominent monuments, the terrace and associated buildings at Persepolis and the tomb of Cyrus the Great at Pasargadae, had achieved wide renown thanks to the European rediscovery, redaction and dissemination of key historical works like Herodotus' *Histories* and Arrian's *Anabasis*. With editions of such sources in their saddlebags, European visitors to Iran bound the historical and sometimes mythic narratives of their Classical heritage to the standing monuments of the ancient Persian landscape. Subjected to eyewitness examination and scrutiny that had not occurred since antiquity, these monuments began to assume a position in the European imagination that acted as a foil to the often negative views engendered by real-life encounters with the corrupt and excessive behaviours witnessed in the Safavid realm. Eventually, examination was complemented by excavation and European engagement with Iran's pre-Islamic past expanded throughout the course of the nineteenth century. At the same time, Greek and Latin sources on Iran began to make their way into the hands of nineteenth-century Iranian intellectuals, for whom the achievements of the Achaemenids stood out in stark contrast to the social, economic and political ills of their own era. Concurrently, an aspect of modernity arrived in Iran when photography was introduced and the photographic habit helped engender interest in the standing monuments of the Qajar realm, particularly Persepolis, in the mind of Nasr ed-Din Shah and others, like Forst-al-Dawla. This nascent interest was amplified by the Shah's journeys to Europe, where he was exposed to some of Europe's major museums and ways in which Europe's great powers displayed and reflected on the relics of their own ancient past. Thus, mytho-poetic notions of Iran's glorious past in Ferdowsi's *Shāhnāma*; Greek and Latin sources on Achaemenid history; early encounters of Europeans with the Achaemenid monuments; early excavation; and a growing consciousness of Persia's monuments and history amongst Qajar-era intellectuals together played a role in enmeshing ancient Iran in a web of knowledge populated by Iranians and Europeans that was global in its very essence.

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Part X

Conclusion

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10.1
Long histories of globalization

Jan Nederveen Pieterse

Introduction

How old is globalization or when did it begin? In view of the contemporary feel of many globalization effects, the question seems moot. The common understanding in media and in many scholarly accounts is to view globalization as a trend of recent decades. 'The usual timescale in which "globalization" is considered is at minimum post-Cold War, at maximum post-Second World War' (Wilkinson 2006: 69). A collection of articles on the 2008 crisis titled 'Crises in the era of globalization' adopts a contemporary perspective and refers to recent decades (Gills 2010). For several social science and humanities disciplines this is the relevant time frame for the accelerating density of global flows and effects. In economics, cultural studies, communication, media and film studies, studies of marketing, international relations and much political science, the effective database of globalization trends runs from the 1970s or 1980s onward.

What then is the significance of global history, of world-system studies and those who date globalization or global trends from earlier times? Are these mere antecedents of globalization? Does it make sense that a process as momentous as globalization would just be a few decades old? Understandings of globalization such as 'complex connectivity' (Tomlinson 1999: 2) may situate globalization in recent decades, but perspectives on globalization such as material exchange, economic, social and cultural flows take us much further back in time.

Several issues are at stake in periodizing globalization. First, because of its presentist leanings much research treats globalization unreflexively, may overlook structural patterns, present as novel what are older features and misread contemporary trends. Second, a presentist view implies a Eurocentric view and thus recycles the massive cliché according to which world history begins with the 'rise of the West'. Conventional cut-off points in globalization history, 1500 and 1800, echo old-fashioned Eurocentric history, famously critiqued over three decades ago by the anthropologist Eric Wolf in his book *Europe and the people without history*: 'The central assertion of this book is that the world of humankind constitutes a manifold, a totality of interconnected processes, and inquiries that disassemble this totality into bits and then fail to reassemble it falsify reality' (1982: 3). Third, this view of globalization is not global. It ignores or downplays non-Western contributions to globalization, such as those documented in this volume. This approach does not match historical records and makes little sense in times of growing multipolarity when multicentric readings of history have become more pertinent. Fourth, it is out of step with current and wider globalization research, including research in archaeology, which this volume sets forth. Fifth, the periodization of globalization is an area of controversy in globalization research.

Periodizing globalization raises many problems. The aim of this discussion is to make *explicit* the analytics and criteria that inform periodizing globalization; the treatment is organized around key questions. The first section discusses the problems of presentism and Eurocentrism. The second section scans approaches that inform world history such as universal, civilizational and comparative history, the Annales school and world-system analysis and discusses their implications for historicizing globalization. The third section asks what is the unit of analysis, which is a key variable in timing globalization. The fourth question arises from looking beyond Eurocentrism: if occidental globalization is inadequate and we look further back, then how far back do we go? Even if we consider only Eurasian oriental globalization (from approximately 500 CE) as an alternative, without broadening our view to include the various other scenarios developed in this volume, we raise a further question: if oriental globalization is pertinent, what about its antecedents and infrastructure? This also brings us to archaeology – though 'a latecomer to the party' (Pitts this volume), what does archaeology bring to globalization? How, confining ourselves still only to Eurasia, do the history of antiquity, the ancient empires and the Greco-Roman world relate to globalization? Several accounts situate these as extensions of the Bronze Age, against the wider backdrop of Afro-Eurasia. But, as other contributors to this volume make clear, there were always other globalizing processes afoot, at best only tangentially associated with developments in Europe and Central Asia, as around the Indian Ocean rim in the late first and early second millennium CE, and elsewhere, as in the New World, Australasia and the Pacific, entirely unrelated until after 1500. The concluding section reviews the arguments and incorporates the various historical streams and perspectives in proposing a framework of phases of globalization. In the process, this exercise of combining history and globalization seeks to provide an X-ray of globalization thinking.

Presentism and Eurocentrism

As noted in a number of the other chapters in this volume, the term globalization emerged first in business studies in the 1970s and then sprawled widely and rose steeply in the 1990s. Its rise followed the postwar development of multinational corporations and subsequent spurts in information and communication technology (ICT), global value chains (GVC), global advertising, global finance and jet travel.

Because the theme of globalization took off in the 1990s and key texts on globalization were written in this period, much of the discussion is marked by 1990s themes and sensibilities. Then key works on globalization were written so globalization was colonized by then reigning perspectives that were superimposed on globalization, even though they were not particularly global. Themes prevalent in 1990s sociology were transposed to globalization, such as by Giddens (1990), who defined globalization as an 'extension of modernity'. Modernity, of course, is a Western project. David Harvey's (1989) 'time–space compression' became an oft-quoted description of globalization, even though the idea of the 'annihilation of distance' is mechanical and inappropriate. Yes, communication and travel across the planet have become easier and faster, yet time, space and distance still matter, in some respects more so because access to communication and mobility is differentiated by class, as ample discussions of intricate relations of the global and local in anthropology and geography show. What is at issue then is the reorganization and re-signification of time, space and distance, rather than their compression or annihilation.

Several disciplines date globalization from the 1970s with the formation of global value chains and accelerated communication (most economics, international relations, political science, and media studies). A further periodization refers to neoliberal globalization, from the 1980s.

In much sociology the time frame widens, for a keynote is modernity, which is assumed to unfold with the Enlightenment, the French Revolution, followed by industrialization, from *c.*1800. In political economy and Marxist views, the time frame widens again and the threshold is 1500, following Marx's dictum 'the conquest of the world market marks the birth of modern capitalism'. Here globalization is equivalent to 'modern capitalism'. Thus, capstone moments of globalization are 1500 and 1800. Each links back to the Renaissance: the 1500 view via the journeys of reconnaissance and Columbus, and the 1800 view via the Renaissance humanists, the seventeenth-century scientific revolution and the Enlightenment philosophes, setting the stage for modern times. By implication each also links back to antiquity, so these views on globalization incorporate the classical world, but do so via a conventional historical lens. Clearly this is an occidental account of globalization, not a global account.

The disadvantage of taking contemporary times (1970s) as the start time of globalization is presentism or ignoring history. The disadvantage of modernity (from 1800) as cut-off in globalization thinking is Eurocentrism, an 'intellectual apartheid regime' (Hobson 2004: 283), a 'great wall' (Jennings 2011) that cuts Europe off from global history and gives us a biased and shallow perspective on both history and modernity. The disadvantage of using 'modern capitalism' (from 1500) as cut-off is ignoring earlier forms and infrastructures of capitalism; as Fernand Braudel asked, why not the thirteenth century? Even in 1500, as McAnany and Yoffe (2010: 10) note,

> some of the most powerful and largest cities in the world existed [not in Europe but] in China, India, and Turkey. In the year 1000 [CE], many of the mightiest cities were located in Peru, Iraq, and Central Asia. In the year 500 [CE] they could be found in central Mexico, Italy, and China. In 2500 [BCE] the most formidable rulers lived in Iraq, Egypt, and Pakistan.

Table 10.1.1 gives an overview of disciplines and perspectives on globalization and their different timelines, listed from recent to early (discussion is in Nederveen Pieterse 2015a).

We can cluster perspectives on globalization according to three main time frames, each of which involves different sets of assumptions (Table 10.1.2).

Norbert Elias (1994) recommended that social science adopt *Breitsicht und Langsicht*, a broad view and a long view. Applying this to globalization research yields wide-angle and historically deep perspectives on globalization. First, several features that are associated with contemporary globalization existed also in earlier eras, which gives us a finer understanding of what is distinctive for contemporary times. Second, the long view breaks the spell of Eurocentrism, which is essentially the nineteenth-century view when the West was triumphant. Third, the long view enables us to understand that the contemporary rise of emerging economies, particularly in Asia, is not just a rise but a comeback, which gives us a clearer perspective on ongoing trends and an account of globalization that is more relevant in global contexts. Fourth, the long view synchronizes with the broad definition of globalization as growing connectivity over time, the growing density of connections between distant locations. Fifth, it breaks with representations of the past as immobile – segmented – which is refuted by research on material exchanges (e.g. Versluys this volume), technology (McNeill 1982), travel, migrations (Hoerder 2002) and the movement of knowledge and religion. Sixth, the long view embeds globalization in evolutionary time. Taken in this sense globalization becomes a human species feature, part of its ecological adaptability

Table 10.1.1 Globalization according to social science and humanities disciplines

Disciplines	*Time*	*Agency, domain*	*Keywords*
Political science, international relations	1980	'Internationalization of the state', INGOs	Competitor states, post-international politics, global civil society
Development studies		IMF, World Bank	Debt crisis, structural adjustment
Geography		Space, place	Glocalization, local–global interactions
Economics	1970	MNCs, technologies, ICT, banks, hedge funds	Global corporation, GVC, world product
Cultural studies		Media, film, advertising	Global village, McDonaldization, Disneyfication, hybridization
Philosophy	1950	Ethics	Global problems, global ethics
Sociology	1800	Modernity	Capitalism, industrialism, urbanization, nation states
Political economy	1500	Modern capitalism	'Conquest of the world market'
History, historical anthropology	3000 BCE	Population movements, trade, technologies, world religions	Widening scale of social cooperation. Bronze Age, global flows, ecumene
Biology, ecology	Time	Integration of ecosystems	Evolution, global ecology, Gaia

Table 10.1.2 Major perspectives on start of globalization

Time frame		*Dynamics of globalization*	*Disciplines*
Short	1970 CE	Production technologies, form of enterprises, value chains, marketing; cultural flows	Economics, political science, cultural and communication studies
Medium	1800 CE	Modernity	Sociology
	1500 CE	World market, modern capitalism	Political economy
Long	3000 BCE	Growing connectivity, urbanization, forms of social cooperation	History, anthropology, archaeology

that enables it to inhabit all of planetary space. It becomes part of Big History, which situates planetary evolutionary processes within cosmic evolution (Spier 2010). The disadvantage of the long view is that globalization becomes too general, too all-encompassing a framework. The counterpoint to this objection is to identify phases and shifting centres of globalization, which the closing section takes up.

World history, history of globalization

Global history is a delta of multiple streams. The widest stream is *universal history*, which straddles world history. The origins of universal history as a genre can be traced to Greek historiography around the fifth century BCE 'in the effort to encompass the notable happenings of all the poleis and their neighbors' (Mazlish 1993: 3). Universal history 'acknowledges the totality of history' and taken in a broad sense 'can be understood as the total temporal, spatial and structural process of human development' (Kossok 1993: 93, 96–97). Its lineages include eighteenth-century encyclopedic history, von Humboldt (*Kosmos* 1845), Laplace, d'Holbach, Kant and Hegel (Spier 2010). Kindred views are Barraclough's 'general history' (1955) and Braudel's 'total history', 'the study of time in all its manifestations' (1980: 69).

Some approaches to universal history situate human *evolution* in a wider context. The *Columbia history of the world* opens with chapters on 'The Earth and the Universe', 'The geological evolution of the Earth' and 'The evolution of life' (Garraty and Gay 1985). The Big History approach updates these perspectives, goes back to the Big Bang 13.7 billion years ago, adopts a perspective of cosmic evolution, situates human evolution in the 'galactic habitable zone' and notes that humanity represents no more than 0.005 per cent of planetary biomass (Spier 2010: 27, 31).

Other approaches emphasize the history of *civilizations*, as in in Gibbon, Spengler, and Toynbee's classic *Study of history*. World history is a confluence of several currents. Among the oldest strands is the empirical history of trade routes and nodes (as in Pirenne, Curtin). The Annales school combines the history of trade networks with structural transformations in the *longue durée*. The Chicago school (McNeill, Hodgson) combines civilizational and anthropological history and archaeology. McNeill's *Rise of the West* (1963) was followed by *A world history* (1967). The *Journal of World History* was founded in 1990.

Old-school, state-centric national history widened to regional history (as in Reid, Gunn) and gave rise to comparative studies (as in Bayly, Pomeranz) and to parallel and connected history (Lieberman). Imperial and colonial history and the broad palette of thematic history (economic, social, military, cultural, art history, history of science, technology, ideas, language, mentalities, etc.) all feed into global history. Histories of commodities (such as sugar, salt, cotton, indigo) make wider trade links visible, while histories of diasporas and migration show widening social networks. To each of these approaches there are narrow and broad, Eurocentric and non-Eurocentric versions. Eurocentric perspectives count world history from the sixteenth-century rise of the West and treat 1500 as a major caesura in global history.

'Globalization' is a latecomer to this delta and figures in accounts from the 1990s onward (Mazlish and Buultjens 1993; Hopkins 2002, 2006). Global history, in contrast to world history, refers to 'world history in the global age' (Mazlish 1993). Arguably, it takes only a partial step forward.

The timeline of the conventional Western history curriculum is the premodern (pre-1500 CE), early modern (1500–1850 CE), modern (1850–1945 CE) and contemporary era, a timeline that echoes in many accounts of globalization (e.g. Held *et al.* 1999; Robertson 2003; Marks 2007). Hopkins's volume *Globalization and history* (2002) follows Bayly's time frame in which 'archaic globalization' (preindustrial, before 1500) is followed by 'proto-globalization' (1600–1800), 'modern globalization' (from 1800) and 'contemporary globalization' (from 1950) (Bayly 2004). The volume's chapters mostly deal with developments post-1600. In other words, in this account 'real globalization' refers to 'modern globalization', which is European, Western, and what comes before are preludes to, infrastructures of globalization. This caesura in which globalization unfolds from 1500 and 1800 reaffirms that Eurocentrism – 'modern history' and modern globalization start with Europe. Informed by comparative studies and acknowledging sprawling contributions to Europe's take-off, this narrative both opens wider to the past and shutters it by means of the conventional rupture of modernity (Nederveen Pieterse 2005 provides a recent critique). While this approach makes non-Western infrastructures more visible (as both Wolf 1982 and Trouillot 2003 argued for), the 'product' remains European. This global history approach rectifies presentism, while recycling Eurocentrism.

By one account this is a semantic issue. Many historians have traced wide and deep infrastructures of global connectivity without using the term globalization. By another account, terminology matters and periodizing globalization is representing and negotiating world history. Beyond semantics, the essential issue is whether or not a caesura that privileges Europe (read: modernity, modern capitalism, modern world-system, modern globalization) is appropriate. Several contributions to world history question or reject this rupture. McNeill (1979) and Hodgson (1974, 1993) are concerned with broad civilizational lineages, drawing on the archaeology and anthropology of Childe, Renfrew and others. 'Globalization' doesn't figure in these accounts but neither does a rupture of 'modernity'. Many historians reject this caesura (such as Blaut 1993; Stavrianos 1998; Frank 1998; Goody 2006).

Another current of global history is world system studies. Wallerstein's approach combines Marx, dependency theory and Annales school history. Wallerstein's focus on the 'long sixteenth century' (1480–1620 CE) follows Marx. Fernand Braudel (1979), rather, argued that the onset of modern capitalism in Europe took place in the thirteenth century with Venice and Genoa as centres of the Levant trade. Janet Abu-Lughod (1989) pushed not only the timeline back but also changed the geographical focus to Egypt and the Middle East. Their arguments are complimentary: while Braudel focuses on the northern Mediterranean, Abu-Lughod looks at the southern Mediterranean, as twin sides of the Levant trade. The Mediterranean circuit was the infrastructure of the Atlantic journeys of reconnaissance, undertaken by Spain and Portugal in league with the Genoese and informed by Arab navigators (Parry 1973). The Mediterranean economy set the stage for the Atlantic economy, the focus of Marx and Wallerstein. In addition, Wallerstein (1974) is concerned with the Low Countries and the Baltic trade. Recent accounts treat the Low Countries as an extension of the Mediterranean economy, too (Morris 2005). Wallerstein's 'modern world-system' that over time has incorporated peripheral areas, and continues to do so, is a strong version of Eurocentrism.

Many subsequent studies criticize Wallerstein's Eurocentrism, his preoccupation with the 'long sixteenth century' and the Baltic–Atlantic economies, and go further back in time (e.g. Chase-Dunn and Hall 1991; Frank and Gills 1993; Denemark *et al.* 2000; Chase-Dunn and Anderson 2005; Friedman and Friedman 2008). Because it is mostly undertaken by social scientists rather than historians, this approach is better known in social science and anthropology than in history. An exception to this is in Indian Ocean studies, which has fostered numerous critically informed historical studies that have sought to redirect attention away from Europe and Europeans as significant actors in the shaping of Indian Ocean history. The most comprehensive recent attempt is probably Phillipe Beaujard's (2012) two-volume *Les mondes de l'océan*, which draws on world system theory. Other more regionally oriented studies (e.g. Chaudhuri 1985; Lombard and Aubin 2000; Pearson 2005; Ho 2006; Sheriff 2010; Alpers 2013) focus on the contributions of different non-European actors and historical forces (such as Islam).

World-system studies focus on system features as the unit of analysis: core and periphery relations (and semi-periphery), the incorporation of outlying regions, cycles and crises. Much effort has gone into measuring cycles of expansion and contraction, A and B phases, via changes in city size (Frank 1993) and variables such as climate change (Chew 2006). Cores and peripheries are now measured in terms of population densities (Gills and Thompson 2006b: 11).

Wallerstein's 'modern world-system' is not merely Eurocentric; it is also *centrist* in claiming a single central world-system. Centrism (and its kin universalism) is a trope that is as old as the first civilizations, empires and religions that claimed a dominant status. In nineteenth-century anthropology, diffusionism traced cultural traits to centres of diffusion, in which Egypt held the centre stage. New archaeological findings in the 1930s pointed to Sumer and Mesopotamia as older civilizations that influenced ancient Egypt. David Wilkinson (1987) develops this in the idea that from the confluence of Mesopotamian and Egyptian civilizations, a 'central civilization' emerged around 1500 BCE; a restatement of diffusionism that expands the classic focus on Egypt with Mesopotamia.

Frank and Gills (1993, 2000) expand on Wilkinson's argument. They argue that 'interpenetrating accumulation' or 'interdependence between structures of accumulation and between political entities' ranged wider, extending to the Levant and to the Indus valley civilization, and occurred earlier, around 2700–2400 BCE (Frank and Gills 1993: 84). Thus they trace the history of the world-system back from 500 to 5,000 years. According to Frank, given 'the evidence for the existence of *one* immense Afro-Eurasian world system in the early Bronze Age', 'there is an unbroken historical continuity between the central civilization and world system of the Bronze Age and our contemporary modern capitalist world system'; 'the present world system was born some 5,000 years ago or earlier in West Asia, North Africa, and the Eastern Mediterranean' (1993: 392, 387, 390).

Thus while historical world-system studies break with Eurocentrism, they do not necessarily break with centrism. The notion of a single centre lives on in some world-system approaches to globalization. According to Gills and Thompson, 'systemic expansion is very much akin to globalization' (2006: 10). Cioffi-Revilla (2006: 87) distinguishes two dynamics of globalization, *endogenous* ('a process of growth or expansion that takes place within a given world region') and *exogenous* (which 'occurs between or among geographically distant world systems that had previously been disconnected from each other'). If we apply this to the Atlantic system, from a European viewpoint its development is endogenous whereas from the viewpoint of Africa, the Americas or Oceania it is exogenous globalization; so the distinction is tenuous. Centrist world-system thinkers privilege globalization as system expansion (endogenous globalization) over exogenous globalization. Of course, 'incorporation' is a major recurrent process (Hall 2006), but it is only part of the wider story.

The significance of multiple civilizations is a widely shared premise. Centrist approaches have been outliers ever since Toynbee's world history. Regional and comparative history has gradually sidelined the once dominant focus on Europe and the West. Eurocentrism, a mainstay of hegemonic history, has been refuted many times over. Wallerstein's modern world-system has been overtaken by comparative world system studies; it lives on in approaches that adopt a totalizing take on contemporary world capitalism (such as Harvey 2005 and the transnational capitalist class approach) but has negligible influence in global history. The centrist approach in world-system studies extrapolates dependency theory's centre–periphery structure to the point of reification; its key weakness is that it is too one-directional. Classic world-system theory resembles structural functionalism in overemphasizing structure and has been criticized for downplaying the role of local forces in shaping world systems. Fine-grained studies of imperialism correct centrist metropolitan approaches with pericentric and web approaches (Fieldhouse 1973; Nederveen Pieterse 1989).

Frank's thesis of a single world-system raises several problems: the archaeological evidence is thin and sparse and the argument is loose (see comments appended to Frank 1993). Asserting a *continuous world system* does not make much sense and at any rate must be combined with multiple dynamics and changes of centres and routes. Its heuristic value is minor, for the discontinuities are as important as the continuities and its metaphoric value is counterproductive.

Chase-Dunn contrasts continuationist, in the sense of asserting a single continuous world system, and comparativist world system studies (Frank 1993: 407). Comparative world system studies recognize multiple civilizations around the globe, avoid centrism and do not claim continuity between past world-systems and the contemporary world-system (Chase-Dunn and Hall 1997).

A variant on the theme of multiple civilizations is the parallel and connected history approach, which recognizes not just multiple civilizational zones but tracks parallel developments across them and argues that while many have been interconnected they are not reducible to one another (Subrahmanyam 1997; Lieberman 1999, 2003). The comparative world system approach concurs but differs in terms of the unit and methods of analysis by focusing on systems, rather than civilizations. The evolutionary world politics approach concurs but emphasizes transformations of political organization over time. Scanning the delta of global history there are several currents such as anthropocentric and evolutionary accounts and centric and multicentric perspectives. Table 10.1.3 gives a schematic overview.

In recent work the distinction between the history of world-systems and the history of globalization fades into the background (Gills and Thompson 2006a). According to Jerry Bentley, the study of

> historical globalization . . . maintains that the world has never been the site of discrete, unconnected communities, that crosscultural interactions and exchanges have taken place since the earliest days of human existence on planet earth, that Europe has not always been a unique or privileged site of dynamism and progress, that identities have always been multiple and malleable.
>
> *(Bentley 2006b: 29)*

The same expansive perspective is certainly brought to the fore in the regional surveys in the present volume.

The unit of analysis

Units of analysis in approaches to world history include empire (Gibbon), civilization (Toynbee, Spengler), ecumene or the interplay of multiple zones (McNeill, Hodgson), world-economy (Braudel), world-system (Wallerstein), networks (Mann, Castells, Chase-Dunn), cities (Jennings), innovations (Korotayev) and transcultural material exchange (archaeology, this volume). The category 'globalization' is a latecomer; while world history has a long lineage, 'history of globalization' is a recent preoccupation. The question is how does globalization enter the conversation?

Table 10.1.3 Approaches to global history

Approaches	*Keywords and variants*	*Sources*
Eurocentric history	World history ruptures 1500, 1800	Mainstream, Bayly, Hopkins
World history	Multiple civilizations	Toynbee, Barraclough, McNeill, etc.
	Parallel and connected history	Subrahmanyam, Lieberman
World system studies	Modern world-system from 1500	Wallerstein, Cioffi-Revilla
	A single world-system 5,000 years	Frank and Gills
	Comparative world-system studies	Chase-Dunn/Anderson, Friedman
Archaeology	Connectivity, material exchange, networks, cities	LaBianca/Scham, Jennings, this volume
Evolutionary world politics	Transformation of political institutions	Thompson, Modelski
Evolutionary history, Big History	Embedded in planetary evolution	Garrathy/Gay, Spier

Economists prefer hard, quantifiable definitions of globalization. O'Rourke and Williamson (2002) take as the criterion for globalization the convergence of commodity prices across continents, which they time in the 1820s. Flynn and Giraldez ask, 'at what point does the integration of world regions become "globalization"?' (2006: 234). In their view globalization means 'the permanent existence of global trade' when all major zones of the world 'exchange products continuously . . . and on a scale that generated deep and lasting impacts on all trading partners' (244). They conclude that 'The birth of globalization occurred in 1571, the year that Manila was founded as a Spanish entrepôt connecting Asia and the Americas' (244).

The emergence of a *world economy* is a familiar threshold of globalization: in Braudel's terms, the merger of economic worlds into a world economy, or 'the "compression" of human history into a worldwide system of reciprocal communication . . . penetrations, influences, and dependencies' (Kossok 1993: 97). This is often timed to occur around 1500. Braudel and Abu-Lughod date this in the 1200s and research on Asia (Frank 1998; Gunn 2003) broadly concurs. John Hobson times this much earlier. In his view, while global connections run as far back as 3500 BCE, 'the big expansion of global trade occurred during the post-600 period' (2004: 35), so Hobson takes 500 CE as the start time of globalization, under the heading of oriental globalization, spurred by 'the revival of camel transport between 300 and 500' (34). A different perspective holds that a 'commercial revolution' unfolded from 1000 BCE:

> a web of direct commercial ties that linked a very large portion of the world, with active points in the eastern Mediterranean, south China, and India, and with connections to Europe, West Africa, East Africa, Indonesia, Central Asia, the north Pacific and the western Pacific. The main elements of this new system of commerce and its changes from earlier systems of exchange included: an expanded set of commodities; the use of widely recognized systems of money; the development of new technology of shipping, accounting, and merchandising; the establishment of well-traveled commercial routes, with ports and caravanserai; the creation of social institutions of commerce such as trade diasporas; and the development of ideas and philosophies to address the problems of commerce.
>
> *(Manning 2005: 87; Ehret 1998)*

> The era of the commercial revolution was also a time in which major new traditions developed in religion and ethical philosophy. Zoroaster and the Buddha, Confucius, Laotse, the Hebrew prophets, the Greek philosophers, Jesus and others preached about the fundamental issues of life, death, community, and destiny.
>
> *(Manning 2005: 89)*

This era matches Karl Jaspers' axial age (800–200 BCE) and signals growing global consciousness.

If we adopt a wider criterion and take the development of trade links between distant regions as a minimal threshold of globalization, it leads further back. To return to my Eurasian example, for instance, that means the Bronze Age. Early trade across that region is mixed in with tribute and booty. Besides silk and cotton from China, early trade includes lapis lazuli, turquoise, agate and beads. The Jade Road from Central Asia to China dates back to 3000 BCE and the early Silk Road, from Xian to the Mediterranean, goes back to 800 BCE (Mair 1998: 64, 258, 555). This matches the timing of early technologies of commerce such as charging interest on loans, which dates back to 3000 BCE in Sumer (Mieroop 2005).

Archaeologists such as Jennings take the formation of cities as a threshold of globalization in the sense of nodal points in connectivity and in the emergence of 'global culture' (loosely defined). The Uruk period (4200–3100 BCE) ranks 'as a critical period of rapid urbanization and

Table 10.1.4 Thresholds of globalization

Time	*Criterion*	*Sources*
4200 BCE	Development of cities	Jennings
3000 BCE	Trade linking multiple regions	Mair, Goody
	Innovations, diffusion of technology and information	Korotayev
1000 BCE	Trade linking a large portion of the world	Manning, Ehret
500 CE	Emergence of a world-economy	Hobson
1200		Braudel, Abu-Lughod
1500		Marx, Wallerstein
1571	Trade linking all major zones of the world	Flynn/Giraldez
1820s	Convergence of commodity prices across continents	O'Rourke/Williamson
1960s	Multinational corporations	General
1980s	ICT, containerization, end of Cold War	

social change in the wider Mesopotamian world', with Uruk-Warka as the major urban centre, which at its peak was three times the size of Athens (2011: 58). In sum, we have the following thresholds for globalization, from early to recent (Table 10.1.4).

However, what most of these thresholds have in common is that they are measures not of globalization but of *globality*. They assume that for globalization to occur there must first be globality, so in effect they diagnose the product as a precondition for the *process* through which it comes about. This reflects a recurrent confusion between globalization as process and as condition or outcome, between globalization and globality. Should globalization be *global* in a literal sense and encompass the world? Should it refer to conditions that are 'sufficiently global' according to a minimum threshold? Rejoinders to this view are, first, that globalization refers to a process, not a condition. Second, as Abu-Lughod notes, global connections are never *entirely* global: 'No world system is *global*, in the sense that all parts articulate evenly with one another' (1989: 8). This point is also well made by the archaeological contributions to this volume and, indeed, one might even go so far as to say that archaeological research provides the best, or at least the most tangible, evidence in support of Abu-Lughod's statement. Third, recent history of antiquity suggests an analytical shift to a less structuralist and more processual understanding of globalization, a turn to processes, trade routes and nodes, migrations and interconnections (cf. Frank 1996). Here, globalization functions as a heuristic, 'a shift in attention paid to questions of knowledge, communication flows, actor-network relations, interconnections, spatiality, mediality, agency, etc.' (Holban 2011). An example is focusing on the diffusion of innovations and technologies as a driver of globalization (Korotayev 2005).

I define globalization as the trend of growing worldwide connectivity (Nederveen Pieterse 1995; 2015a: 19). Connectivity is a better yardstick than 'integration', which is too strong a term. Growing worldwide connectivity is the keynote in many recent accounts of globalization. This definition is general, matter-of-fact and processual. It implies a long view for obviously growing connectivity is not a recent trend. It does not require a specific definite beginning or threshold. In this view globalization is spurred by transport and communication technologies, institutions of commerce, and security conditions. The rhythms of globalization follow the vicissitudes of connectivity, which aren't always in forward motion; there are accelerations as well as decelerations of connectivity. These dynamics then frame the phases of globalization (discussed below).

Oriental globalization in the Old World

The sixteenth-century Portuguese writer Tomé Pires observed, 'Whoever is lord of Malacca has his hands on the throat of Venice' (quoted in Abu-Lughod 1989: 291). 'Venice survived because Egypt survived, sustained by the persistence of the southern route to Asia', according to Abu-Lughod (1989: 215). Abu-Lughod views the thirteenth-century world system of Egypt and the Levant as part of eight interlinked subsystems which 'can be grouped into three larger circuits – the western European, the Middle Eastern and the Far Eastern' (1989: 33–34). This perspective matches Frank's *ReOrient* and historians of Asia and the Indian Ocean (on the latter, see above). This places the beginnings of a world economy in Song China and India from 1000 or 1100 CE. Asia remained the driving force of the world economy until 1800 (Pomeranz 2000 and others concur). A shorthand account of this phase of globalization is the later Silk Routes.

Much Silk Roads history, in view of its heading, focuses on the East–West movement of trade and culture. This downplays that the East–West movement was preceded and accompanied by West–East movements, from the Middle East to Asia, as part of a long history of osmosis in both directions. An essential part of this history is Muslim traders going east, as far as China and Korea. Muslim traders reconnected China and East Asia with the world economy that was centred at the time in the Middle East; reconnected because there were earlier trade links between East Asia and the Greco-Roman world but the overland silk routes declined after the fall of the Roman Empire (Abu-Lughod 1989: 265; Sherratt 2006; Teggart 1939). Ninth-century postmasters in Persia and the Arab world kept detailed records of Asian routes as far as Korea (Hoerder 2002). According to Goody, 'In the ninth century there were said to be over 100,000 Muslim merchants in Canton' (2010: 254). Muslim Afro-Eurasia was a vast intercultural expanse in which merchants and scholars travelled; the world of Ibn Battuta, Ibn Khaldun, Ibn Rushd, Maimonides, a world in which Chinese, Indian, Persian, Turkic, Central Asian, Muslim, Arabic, Mongol, Jewish and Berber cultures were interconnected. The *Dâr al-Islâm*, the 'abode of Islam' was not the world's earliest cosmopolitanism, but one that stretched further and endured longer than any other (Hodgson 1974; Nederveen Pieterse 2007). This gave rise to the encounter of the trading religions Buddhism and Islam (Elverskog 2010). Zheng He, the great Chinese mariner and contemporary of Columbus, was a Hui-Muslim, also known as Ma Sanbao and Hajji Mahmud Shamsuddin. Surely the '*Pax Islamica* that stretched from Morocco to Mataram' (Hopkins 2002: 33) is a major part of globalization history, a point also made by many archaeologists of the Indian Ocean rim and West Africa (including in this volume).

Abu-Lughod adopts a world-system approach while being critical of the definition of world-systems (1989: 9), so hers is a crossover study that is open to wider horizons. While her focus is the 1250–1350 CE period as a 'world-system' she discusses earlier trade and prosperity. In brief, she notes that among the routes between Asia and the Levant, by comparison to the northern overland route via Armenia, and the southern Red Sea route via Egypt, the 'middle route' via the Persian Gulf was the older and most convenient link; Baghdad declined after the reign of Harun al-Rashid and the Abbasids (191; cf. Kazim 2000, Hoerder 2002). This suggests a timeline similar to Hobson's. Hobson places the origins of a world economy around 500 CE with the resumption of the caravan trade, centred on Baghdad and Mecca: 'oriental globalisation was the midwife, if not the mother, of the medieval and modern West' (2004: 36). In later work Hobson (2012) distinguishes four historical phases, marked by the varying relative strengths of Oriental and Occidental influences.

Thus, in short, we have multiple phases of oriental globalization: (a) Eurasian globalization of the early Silk Roads; (b) West Asian (Middle East) globalization with caravan trade moving towards East Asia, west to east; (c) East Asia-driven globalization of the later Silk Roads (including the various maritime routes) from the Tang era onward, east to west; (d) and the twenty-first century comeback of East Asia with the rise of China.

This view differs markedly from Eurocentric accounts, provides nuances of relative influence and credits oriental influences, past and present. I find this perspective meaningful, with provisos. First, it should be viewed as part of long ongoing processes of East–West osmosis further back in time: 'globalization is braided' (Nederveen Pieterse 2015a). Second, the terminology of modernity (and variants premodern, postmodern) carries Eurocentric luggage so it is best avoided in periodizing globalization. Further, considering that mapping and timing globalization are co-dependent, it makes sense to combine geographical and temporal markers to identify phases of globalization (discussed below). This is a view shared, also, by many of the contributors to this book, albeit from various analytical perspectives.

Archaeology and globalization

Historians of antiquity used to view globalization as a 'modern' or contemporary phenomenon and kept their distance from it. Hopkins's volume *Globalization and history* (2002) prompted historians of antiquity to take up the question whether the Greco-Roman world is part of globalization history (Pitts 2011; Pitts and Versluys 2015). Archaeologists joined the globalization discussion, adopting a networks approach (LaBianca and Scham 2006) and focusing on the formation of cities (Jennings 2011).

In archaeology the focus is on material exchange and connectivity, which overlaps with cultural networks, as many of the papers in this volume illustrate. Social hierarchy and stratification also matter. Material connectivity includes obsidian in the Stone Age, copper, tin in the Bronze Age, ceramics, gemstones, metals, weapons, cattle, food and cloth. Transcultural material exchange further includes knowledge and techniques and sheds light on inter-regional interaction networks.

With their insights in connectivity along with comparative data across multiple regions, archaeologists push the timelines of connectivity back. Thus the long-distance trade in obsidian centred in Catalhöyuk, Anatolia, for example, goes back to 5000 BCE (Rice 1997). Finds in Uruk-Warka, Mesopotamia push urbanization back to the late fifth millennium BCE. In Southeast Asia, the 'globalization of food' is traced to the fourth millennium BCE and extensive seafaring to the second millennium BCE (this volume). Persia is part of inter-regional networks during the first millennium BCE, and so forth. How these findings and understandings of connectivity affect the globalization discussion depends on the theories and analytics of globalization that archaeologists use – which are as varied and diverse among archaeologists as they are among social sciences and humanities generally (a diversity that this volume well illustrates).

Returning to oriental globalization in the Old World, if we accept that the Arab-Muslim world was the epicentre of early oriental globalization we cannot fully understand it without taking into account its Hellenistic character and its role as a 'middleman civilization', brokering between worlds. This suggests that starting Eurasian globalization in 500 CE is inadequate; if this was the onset of a world-economy, this too had its precursors. This includes *inter alia* the contributions of the Greco-Roman world as a nexus between different globalization phases and as a major accelerator of globalization.

The development of a world economy in the strict sense of a trans-regional division of labour that is necessary for social reproduction, plainly applies to the Roman world, which established and sustained an inter-regional division of labour that comprised olive-grape (Gaul, Spain), grain (Egypt, North Africa) and Mediterranean trades (Going 1992; Nayyar 2006). The map of Roman value chains matches the 'greater Mediterranean' of recent accounts, which extends from Sumer to the Danube (and by the sixteenth century to Antwerp) (Morris 2005: 36, 45; Horden and Purcell 2000). Roman networks further included significant trade with India and China (in wine, silk and muslin).

The significance of the Bronze Age has been widely discussed (Mair 1998, 2006; Goody 2010). Vankilde (this volume) adopts the term 'Bronzization' as a stand-in for globalization. The Bronze Age brought plough agriculture, animal traction in agriculture and an urban revolution in much of Eurasia.

The Hellenic-Roman world may be viewed as a Western extension of Eurasian Bronze Age culture; it was contemporaneous with the expansion of Han China in the east (McNeill 1979). As part of Eurasian trade and culture networks the Hellenic-Roman world is linked to the East, is part of East-West osmosis and an East-West hybrid. The Greco-Roman world, then, is a nexus between the Bronze Age phase of Eurasian globalization and the phase of oriental globalization that started in around 500 CE. The Eurasian backdrop sheds light on the world of interconnected knowledge, religions and technologies; the world of Mesopotamia, Egypt, India, Persia, Phoenicia, Greece and Rome; the world of Karl Jaspers' Achsenzeit and Martin Bernal's Black Athena.

This also raises questions of mobility and global consciousness. Stereotypical representations of the past as immobile, fragmented, segmented have been refuted by research on mobility and migrations during the first millennium and in the ancient world (Hoerder 2002; Isayev 2015) and on the spread of knowledge, technology and religions from the Bronze Age onward (McNeill 1982). The Greco-Roman world is also significant in the evolution of cosmopolitanism (Edwards and Woolf 2003) and in globalization as subjectivity, or global consciousness. The Stoics figure as an early cosmopolitanism (Nussbaum 2006). Polybius's *Histories* is often mentioned as a precursor of global sociology, centuries before Ibn Khaldun (Inglis and Robertson 2006; Isayev 2015). After the Punic wars between 160 and 120 BCE, Polybius wrote,

> Now in earlier times the world's history had consisted, so to speak, of a series of unrelated episodes, the origins and results of each being as widely separated as their localities, but from this point onwards [after the Second Punic war] history becomes an organic whole: the affairs of Italy and Africa are connected with those of Asia and of Greece, and all events bear a relationship and contribute to a single end.
>
> (Histories *1.3, quoted in Pitts and Versluys 2015: 18)*

'Orbis terrarum' is an early world consciousness. The major ancient Eurasian cosmopolitanisms, the Roman world with Latin and Indic civilization with Sanskrit, overlap in time (Pollock 1996). After the Latin and Sanskrit worlds shrank and gave way to local vernaculars, Islamic civilization and Arabic emerged as the next major cosmopolitan world, bridging East and West, stretching at its widest expanse from Muslim Iberia to China. The Ottoman Millet system – an early multiculturalism – continued the legacy of Mediterranean, Hellenic and Muslim cosmopolitanism.

Conclusion: retiming globalization

As discussed, assessments of the timing of globalization range widely, from globalization as part of planetary evolution, as a long-term process going back to 3000 BCE and possibly a millennium earlier, as a commercial revolution unfolding around 1000 BCE; as a world economy taking shape around 500 ce, 1100, 1200 or 1500; as modernity, 1800; and as a recent trend from the 1970s.

So when did globalization begin? How we identify the start time of globalization depends on how we define globalization and what we take to be the unit of analysis. If globalization is defined as a condition of *being globally connected* a start time after 1500 would make sense. The problem is that this makes the outcome (global connectedness) a precondition for the process through which it comes about (becoming globally connected); it places the result before the process, the cart before the horse. For instance, according to Leslie Sklair globalization requires the simultaneous occurrence of eight trends (time–space compression, deterritorialization, standardization, unevenness, homogenization, heterogeneity, re-embedding of local culture, and vulnerability), which are rather a mishmash (Sklair 2006; Jennings this volume).

If globalization is defined as the process of *becoming globally connected* and the awareness of this happening, we can distinguish several levels of connectedness, with different start times. At one level, if the unit of analysis of globalization is *growing connectivity*, the connections are as old as human history, as old as when people dispersed and wandered across the planet (Gamble 1993). Connections became substantial and sustained once surplus was generated as a basis for exchange and trade, which points to agriculture, particularly plough agriculture, and urbanization – conditions that in Eurasia first became widely available during the Bronze Age (Goody 2010). This enables inter-regional trade which, in turn, received a boost around 1000 bce, which was accompanied by a surge in global consciousness: the Eurasian axial age.

Many globalization studies are steeped in presentism and Eurocentrism. The general principle is the later the timing of globalization, the greater Europe's role and the more Eurocentric the perspective (Nederveen Pieterse 2015a). The long view gives us deeper insight in the history and depth of human interconnectedness. While the advantage of taking the long view is that it embeds globalization in the *longue durée* and in evolutionary time, the disadvantage is that globalization becomes too general, wide and sprawling a category. Remedying this requires identifying phases and zones of global history, which poses problems of demarcating and labelling periods.

The general idea of phases of globalization that synchronize with advances in transport, communication, travel and awareness is well-established; Robertson (1992) notes such accelerations of globalization in 1500, the 1800s, the late-nineteenth and twentieth centuries. If globalization is defined as growing connectivity, the rhythms of globalization are a function of connectivity conditions, which are spurred by technologies of transport and communication, and conditions of security (such as the Pax Romana and Pax Britannica). Reviewing the literature, 3000 bce is a relevant time range in the Old World, with the additional stipulation of the commercial revolution of 1000 bce as a major acceleration and deepening of connectivity and cross-border awareness, which matches many findings.

On the basis of the preceding discussion we can revisit the timing of globalization and fill in lacunae by showing early and intermediate phases of globalization (Table 10.1.5). Considerations that inform the periodization in Table 10.1.5 are the following: in Eurasia, globalization in the sense of sustained inter-regional trade unfolds with the Bronze Age. Inter-regional trade underwent a boost from 1000 bce and linked Afro-Eurasia. Antiquity and the Greco-Roman world are intermediary phases between the Eurasian Bronze Age and oriental globalization (OG). In the first phase of oriental globalization (OG1), trade flows are primarily eastward, from West Asia (Middle East) towards East Asia. In OG2, the balance is westward, from East Asia towards West Asia (Middle East), resuming the early Silk Routes and with additional maritime Spice Routes. Distinctive for the period from 1500 is the growing role of Europe and the Americas, the triangular trade and the Atlantic exchange while the role of Asia is ongoing. Characteristic of

Table 10.1.5 Phases of globalization

Phases	*Start time*	*Central nodes*	*Dynamics*
Bronze Age globalization	3000 BCE	Eurasia, Mesopotamia, Egypt	Agricultural and urban revolutions, trade, ancient empires
Afro-Eurasian	1000 BCE	West Asia, Greco-Roman world, Africa	Commercial revolution, growing cross-cultural awareness
OG1	500 CE	West Asia (Middle East)	Emergence of a world economy, caravan trade
OG2	1100	East and South Asia and multicentric	Productivity, technology, urbanization; Silk Routes
Multicentric	1500	Atlantic expansion	Triangular trade; spice trade
Euro-Atlantic	1800	Euro-Atlantic economy	Industrialization, colonial division of labour
20C globalization	1950	US, Europe, Japan: Trilateral	Multinational corporations, (end of) Cold War, global value chains
21C globalization	2000	East Asia, China, emerging economies	New geography of trade; global rebalancing

the phase from 1800 is industrialization along with colonialism and imperialism, when Oceania came firmly into the global picture. Twentieth-century globalization includes the world wars, the rise of multinational corporations and the Cold War. The period from 2000 ushers in a new pattern of twenty-first-century globalization, which is a work in progress. Obviously this is only a shorthand overview.

Another major question is centrism or multicentrism. Multicentrism is based on the premise of ‘multiple origins of social complexity, not on a single origin from which social complexity radiated’ (Cioffi-Revilla 2006: 89). This premise is widely shared. That multicentrism can go together or be interspersed with periods of hegemony does not undermine the premise itself. Rather it sheds light on the diversity of practices of empire and hegemony, particularly at the frontiers, whether during the Roman Empire (Wells 1999: 122–47; Woolf 1997), the British Empire or American hegemony. This is important not merely in historical terms but also conceptually. The premise of multicentrism unsettles the proclivity towards the *singular* that is widespread in social science and the humanities – as in globalization, capitalism, modernity, rather than globalizations, capitalisms, modernities (Nederveen Pieterse 2009, 2014). Bentley (2006a, 2006b) rightly criticizes ‘modernocentrism’ as a deeper problematic than Eurocentrism.

Reviewing histories of globalization shows that globalization has been multicentric all along, which is relevant also for later and contemporary trends. In light of the array of ancient globalizations considered in this volume, Western hegemony is a latecomer. Twenty-first century globalization breaks the 200-year pattern of dominant North–South relations with an East–South turn (Nederveen Pieterse 2011), so the era of Western hegemony emerges as a historical interlude (approximately 1800–2000) and present times indicate a return to a historical ‘normal’ in which Asian dynamics have been the driving force of the world-economy through most of the career of globalization.

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